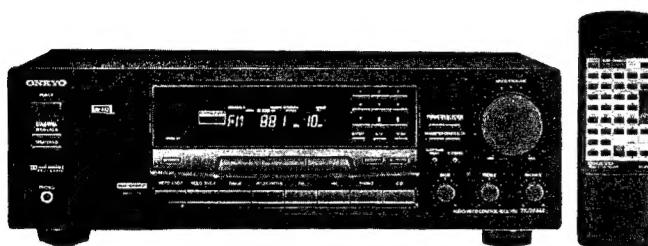


ONKYO® SERVICE MANUAL

QUARTZ SYNTHESIZED TUNER AMPLIFIER MODEL TX-SV444 / MODEL TX-SE500



Black model



Black and Golden models

BMD/BMDN	120V AC, 60Hz
BMP	230V AC, 50Hz
BMW	120V or 220V AC, 50/60Hz

BMP/GMP	230V AC, 50Hz
BMW/GMW	120V or 220V AC, 50/60Hz

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK **Δ** ON THE SCHEMATIC DIAGRAM AND IN THE PARTS LIST ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE THESE COMPONENTS WITH ONKYO PARTS WHOSE PARTS NUMBERS APPEAR AS SHOWN IN THIS MANUAL.

MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

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ONKYO®
AUDIO COMPONENTS

SPECIFICATIONS

AMPLIFIER SECTION

Power Output	
Stereo mode	
Front L/R channels:	70 watts per channel, min. RMS at 8 ohms, both channels driven from 20 Hz to 20 kHz with no more than 0.08% total harmonic distortion.
Continuous Power output:	2 X 80 watts at 8 ohms, 1 kHz (DIN)
Surround mode	
Front L/R and Center channels:	60 watts per channel, min. RMS at 8 ohms, both channels driven from 20 Hz to 20 kHz with no more than 0.08% total harmonic distortion.
Rear channels (Rear only driven):	20 watts per channel, min. RMS at 8 ohms, both channels driven from 20 Hz to 20 kHz with no more than 0.3% total harmonic distortion.
Total Harmonic Distortion:	0.08% at rated power (Front)
IM Distortion:	0.08% at rated power (Front)
Damping Factor:	60 at 8 ohms (Front)
Sensitivity and Impedance	
Phono:	2.5 mV/50 kohms
CD, Multi-CH, Tape Play:	150 mV/50 kohms
Tape Rec:	150 mV/2.2 kohms
Subwoofer Pre out:	2 V/2.2 kohms
Phono Overload:	120 mV RMS at 1 kHz, 0.5% T.H.D.
Frequency Response:	20 Hz to 30 kHz, ± 1 dB
RIAA Deviation:	20 Hz to 20 kHz, ± 0.8 dB
Tone Control	
Bass:	± 10 dB at 100 Hz
Treble:	± 10 dB at 10 kHz
Signal-to-Noise Ratio	
Phono:	80 dB (IHF A, 5 mV input)
CD/Tape:	100 dB (IHF A)

VIDEO SECTION

Signal sensitivity and impedance:	1 Vp-p, 75 ohms (VDP/VCR input, output)
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TUNER SECTION

FM

Tuning Range:	87.5 — 108.0 MHz
Usable Sensitivity	
Mono:	11.2 dBf, 1.0 μ V (75 ohms)
Stereo:	18.2 dBf, 2.2 μ V (75 ohms)
50 dB Quieting Sensitivity	
Mono:	18.2 dBf, 2.2 μ V (75 ohms)
Stereo:	39.2 dBf, 24 μ V (75 ohms)
Capture Ratio:	1.5 dB
Image Rejection Ratio	
U.S.A. & Canadian models:	40 dB
Other area models:	85 dB

IF Rejection Ratio:	90 dB
Signal-to-Noise Ratio	
Mono:	73 dB
Stereo:	67 dB
Alternate Channel Attenuation:	55 dB
Selectivity:	50 dB (DIN)
AM Suppression Ratio:	50 dB
Total Harmonic Distortion	
Mono:	0.15%
Stereo:	0.25%
Frequency Response:	30 Hz — 15 kHz, ± 1.5 dB
Stereo Separation:	45 dB at 1 kHz 30 dB at 100 Hz — 10 kHz

AM

Tuning Range	
U.S.A. & Canadian models:	530—1,710 kHz (10 kHz steps)
European & Australian models:	522—1,611 kHz (9 kHz steps)
Worldwide models:	531—1,602 kHz (9 kHz steps), 530—1,710 kHz (10 kHz steps)
Usable Sensitivity:	30 μ V
Image Rejection Ratio:	40 dB
IF Rejection Ratio:	40 dB
Signal-to-Noise Ratio:	40 dB
Total Harmonic Distortion:	0.7%

GENERAL

Power Supply	
U.S.A. & Canadian models:	AC 120 V, 60 Hz
European & Australian models:	AC 230 V, 50 Hz
Worldwide models:	AC 220-230 V and 120 V switchable, 50/60 Hz
Power Consumption	
U.S.A. & Canadian models:	3.5 A (420 W)
Other area models:	250 W
Dimensions (W X H X D):	435 X 150 X 322 mm 17-1/8" X 5-7/8" X 12-11/16"
Weight:	9.6 kg, 21.2 lbs.

REMOTE CONTROL

Transmitter:	Infrared
Signal range:	Approx. 5 meters, 16 ft.
Power supply:	Two "AA" batteries (1.5 V X 2)
Dimensions (W X H X D):	65 X 18 X 194 mm 2-9/16" X 11/16" X 7-5/8"
Weight:	110 grams, 3.9 oz. (including batteries)

Specifications and features are subject to change without notice.

SERVICE PROCEDURES

1. Replacing the fuses

 This symbol located near the fuse indicates that the fuse used is fast operating type. For continued protection against fire hazard, replace with same type fuse. For fuse rating refer to the marking adjacent to the symbol.

 Ce symbole indique que le fusible utilisé est à rapide. Pour une protection permanente, n'utiliser que des fusibles de même type. Ce dernier est indiqué la qu le présent symbol est apposé.

CIRCUIT NO.	PART NO.	DESCRIPTION
F901	252164Y	5A-UL/T-237,Primary < D/W >
F902	252076	3.15A-SE-EAK ,Primary < P/W >
F903	252075	2.5A-SE-EAK,Primary < P >
F921,F922	252163Y	4A-UL/T-237,Secondary < D >
	252077	4A-SE-EAK,Secondary < P/W >
NOTE : < D > : 120V model only		
< P > : 230V model only		
< W > : Worldwide model		

2. To Initialize the unit

This device employs a microprocessor to perform various functions and operations. If interference generated by an external power supply, radio wave, or other electrical source results in accident which causes the specified operations and functions to operate abnormally.

To perform a result, please follow the procedure below.

1. Turn the power button "ON"
2. Press and hold down the Video 1 button, then press the SPEAKER A button.
3. After "clear" is displayed, the preset memory and each mode stored in the memory, such as surround, are initialized and will return to the factory settings.

3. Safety-check out

(Only U.S.A. model)

After correcting the original service problem, perform the following safety check before releasing the set to the customer. Connect the insulating-resistance tester between the plug of power supply cord and the screw on the back panel.

Specifications: 3.3 Mohm±10% at 500V.

4. Change of voltage

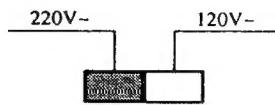
Worldwide models are equipped with a voltage selector to conform with local power supplies. This switch is located on the back panel.

Be sure to set this switch to match the voltage of the power supply in your area before turning the power switch on.

This switch is set to 220V at the factory. Voltage is changed by

sliding the groove in the switch with the screwdriver to the right or left. Confirm that the switch has been moved all the way to the right or left before turning the power switch on.

VOLTAGE
SELECTOR



5. Memory preservation

This unit does not require memory preservation batteries. A built-in memory power back-up system preserves contents of the memory during power failures and even when the unit is unplugged.

The unit must be plugged in and the power switch turned on and off once in order to charge the back-up system. Note that since this is not a permanent memory, the power switch must be turned on and off a few times each month to keep the back-up system operative.

The period of the time during which memory contents are preserved after power has last been turned off varies depending on climate and placement of the unit. On the average, memory contents are protected over a period of 3 to 4 weeks (a minimum of 2 weeks) after the last time power has been turned off. This period is shortened when the unit is exposed to very high humidity or used in an area with an extremely humid climate.

6. Setting the tuning step frequency

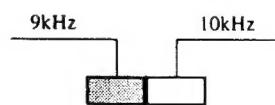
Worldwide models are equipped with a step band selector switch. This switch is located on the back panel. This switch is set to 9 kHz at the factory, but may have to be reset to 10 kHz depending on the area where the unit is used.

AM band step

Europe: 9 kHz

U.S.A.: 10 kHz

AM FREQ.
STEP



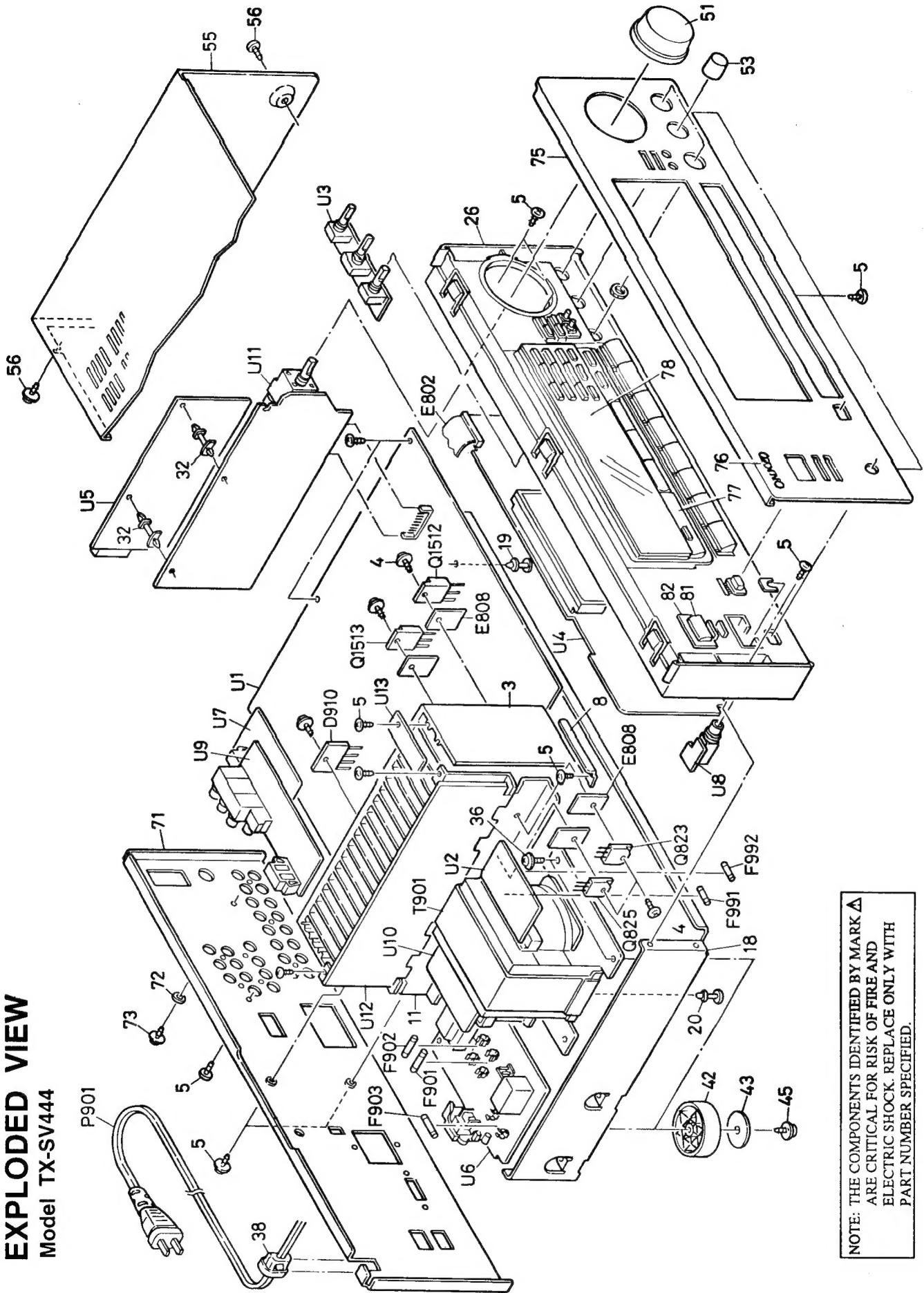
7. Changing the band step

With the exception of the worldwide models, a tuning step selector switch is not provided. When you change the band step, change the parts as shown below.

	To 10kHz	To 9kHz
R727	Open	Short
R724	3.3kohm	Remove

EXPLODED VIEW

Model TX-SV444



NOTE: THE COMPONENTS IDENTIFIED BY MARK **Δ**
ARE CRITICAL FOR RISK OF FIRE AND
ELECTRIC SHOCK. REPLACE ONLY WITH
PART NUMBER SPECIFIED.

PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
3	27160375Y	Heatsink	T901	2301228Y	NPT-1287D, Power transformer <D>
4	801433	3SMSRW, SW+14B(BC) Special screw		2301229Y	NPT-1287P, Power transformer <P/A/T>
5	838130088	3TTB-8B, Self-tapping screw		2301271Y	NPT-1301DG, Power transformer <K/W>
8	27141671	Retainer	U1	IA720584-1AY	NA-AR-5884-1A, Main circuit pc board ass'y <D>
11	27160376	Heatsink S		IA720584-1BY	NA-AR-5884-1B, Main circuit pc board ass'y <K/W>
18	27100320AY	Chassis	U2	IA720585-1AY	NA-ETC-5885-1A, Secondary circuit pc board ass'y <P/W/T/A/K>
19	27190503A	KGLS-8RF, Holder	U3	IA720585-1AY	NA-ETC-5885-1A, Secondary circuit pc board ass'y <D>
20	27190266	KGLS-12RF, Holder	U4	IA720586-1AY	NA-ETC-5886-1B, Tone control circuit pc board ass'y <P/W/A/T/K>
24	28175252Y	Isolation plate		IA720586-1AY	NA-ETC-5886-1A, Tone control circuit pc board ass'y <W>
26	27110952Y	Front bracket		IA720587-1AY	NA-DIS-5887-1A, Display circuit pc board ass'y <D>
32	27190896	KGLS-10S, Holder		IA720587-1AY	NA-DIS-5887-1B, Display circuit pc board ass'y <P>
36	830440989	4TTC-8C(BC), Self-tapping screw		IA720587-1CY	NA-DIS-5887-1C, Display circuit pc board ass'y <T>
38	#2271	Bushing cord		IA720587-1DY	NA-DIS-5887-1D, Display circuit pc board ass'y <W>
42	27175319Y	Leg		IA720587-1EY	NA-DIS-5887-1E, Display circuit pc board ass'y <K>
43	28141332Y	Cushion for leg		IA720587-1FY	NA-DIS-5887-1F, Display circuit pc board ass'y <A>
45	831430988	3TTW-8(B(C), Self-tapping screw	U5	IA720588-1AY	NA-RF-5888-1A, Tuner circuit pc board ass'y <D>
51	28325456Y	Knob, Volume		IA720588-1BY	NA-RF-5888-1B, Tuner circuit pc board ass'y <P>
53	28325454Y	Knob, Tone		IA720588-1CY	NA-RF-5888-1C, Tuner circuit pc board ass'y <T>
55	28184663Y	Top cover		IA720588-1DY	NA-RF-5888-1D, Tuner circuit pc board ass'y <W>
56	838430088	3TTB-8B(B(C), Self-tapping screw		IA720588-1EY	NA-RF-5888-1E, Tuner circuit pc board ass'y <K>
71	27122260Y	Rear panel <D>		IA720588-1FY	NA-RF-5888-1F, Tuner circuit pc board ass'y <A>
	27122261Y	Rear panel <P>		IA720589-1AY	NA-PS-5889-1A, Power supply circuit pc board ass'y <D>
	27122262Y	Rear panel <W>		IA720589-1BY	NA-PS-5889-1B, Power supply circuit pc board ass'y <P>
	27122263Y	Rear panel <A>		IA720589-1CY	NA-PS-5889-1C, Power supply circuit pc board ass'y <T>
	27122264Y	Rear panel <T>		IA720589-1DY	NA-PS-5889-1D, Power supply circuit pc board ass'y <W>
	27122269Y	Rear panel <K>		IA720589-1EY	NA-PS-5889-1E, Power supply circuit pc board ass'y <K>
72	87643010	W3x10F(B(C), Washer		IA720589-1FY	NA-PS-5889-1F, Power supply circuit pc board ass'y <A>
73	838230088	3TTB-8B(Ni), Nickel screw		IA720590-1AY	NA-ETC-5890-1A, Video terminal pc board ass'y <D>
75	27211859Y	Front panel <D>		IA720590-1BY	NA-ETC-5890-1B, Video terminal pc board ass'y <P>
				IA720590-1CY	NA-ETC-5890-1C, Video terminal pc board ass'y <T>
				IA720590-1DY	NA-ETC-5890-1D, Video terminal pc board ass'y <W>
76	28135244Y	Badge		IA720590-1EY	NA-ETC-5890-1E, Video terminal pc board ass'y <K>
77	27215273Y	Decorative frame		IA720590-1FY	NA-ETC-5890-1F, Video terminal pc board ass'y <A>
78	28191752AY	Clear plate		IA720591-1AY	NA-ETC-5891-1A, Headphone terminal pc board ass'y <D>
81	28325451Y	Knob, power <P/A/K/T/W>		IA720591-1BY	NA-ETC-5891-1B, Headphone terminal pc board ass'y <P>
82	27267955Y	Guide, power <P/A/K/T/W>		IA720591-1CY	NA-ETC-5891-1C, Headphone terminal pc board ass'y <T>
D910	22380038	△ RBV602		IA720591-1DY	NA-ETC-5891-1D, Headphone terminal pc board ass'y <W>
E801	260208	Binder		IA720591-1EY	NA-ETC-5891-1E, Headphone terminal pc board ass'y <K>
E802	2047352012Y	NFC7-35-2012, Flexible flat cable		IA720591-1FY	NA-ETC-5892-1F, Video terminal pc board ass'y <A>
E308	223024	△ AC238, Isolation sheet		IA720593-1AY	NA-ETC-5892-1A, Video terminal pc board ass'y <D>
				IA720592-1BY	NA-ETC-5892-1B, Video terminal pc board ass'y <W>
F901	252164Y	5A-UL/T-237, Fuse <D/W>		IA720592-1CY	NA-ETC-5892-1C, Video terminal pc board ass'y <T>
F902	252076	3.5A-SE/AK, Power supply cord <P/T>		IA720592-1DY	NA-ETC-5892-1D, Primary terminal pc board ass'y <W>
F903	252075	2.5A-SE/AK, Fuse <P/T>		IA720592-1EY	NA-ETC-5892-1E, Primary terminal pc board ass'y <K>
F991, F992	252077	4A-SE/AK, Fuse <P/A/T/K/W>		IA720592-1FY	NA-ETC-5892-1F, Primary terminal pc board ass'y <A>
P901	252163Y	4A-UL/T-237, Fuse <D>		IA720593-1AY	NA-ETC-5893-1A, Primary terminal pc board ass'y
	253192HT	AS-UC-6F18, Power supply cord <D>		IA720593-1BY	NA-ETC-5893-1B, Primary terminal pc board ass'y
	253192HT	AS-CEE, Power supply cord <P/T>		IA720593-1CY	NA-ETC-5893-1C, Primary terminal pc board ass'y
	253192HT	AS-SAA, Power supply cord <A>		IA720593-1DY	NA-ETC-5893-1D, Primary terminal pc board ass'y
	253213WSE	AS-KS, Power supply cord <K>		IA720593-1EY	NA-ETC-5893-1E, Primary terminal pc board ass'y
	253233KAW	AS-CEE-2, Power supply cord <W>		IA720593-1FY	NA-ETC-5893-1F, Primary terminal pc board ass'y
P904, P905	25051266	NSCT-2P1356, AC outlet <K>		IA720594-1AY	NA-ETC-5894-1A, Volume circuit pc board ass'y <D>
	25051570	NSCT-2P1357, AC outlet <A>		IA720594-1BY	NA-ETC-5894-1B, Volume circuit pc board ass'y <P/T/A/K>
Q523, Q524	2202843 or	2SC5242-O or		IA720594-1CY	NA-ETC-5894-1C, Volume circuit pc board ass'y <W>
Q5112	2202842	2SC5242-R, Transistor		IA720595-1AY	NA-ETC-5895-1A, Rear amplifier pc board ass'y <D>
Q525, Q526	2202833 or	2SA1962-O or		IA720595-1BY	NA-ETC-5895-1B, Rear amplifier pc board ass'y <P/T/A/K>
Q513	2202832	2SA1962-R, Transistor		IA720595-1CY	NA-ETC-5895-1C, Rear amplifier pc board ass'y <W>
Q823, Q824	2202922	2SC5196-O or			
	2202921 or	2SC5196-R, Transistor			
Q825, Q826	2202913 or	2SA1939-R, Transistor			
	2202912				

NOTE: <D>;120V model only

<P>;230V model only

<W>;Taiwanese model only

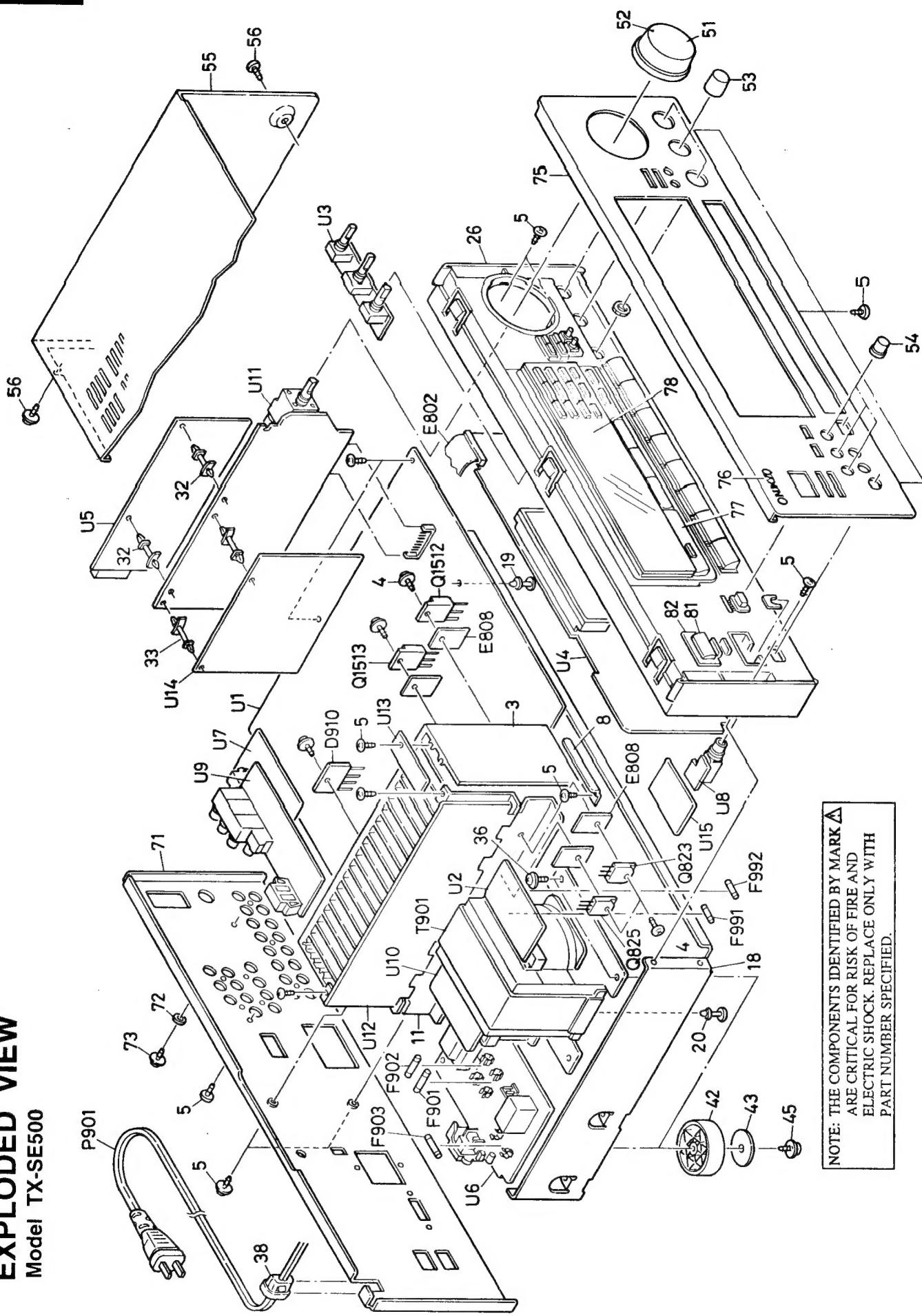
<A>;Asian model only

<K>;Korean model only

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
T901	2301228Y	NPT-1287D, Power transformer <D>	U1	IA720584-1AY	NA-AR-5884-1A, Main circuit pc board ass'y <D>
	2301229Y	NPT-1287P, Power transformer <P/A/T>		IA720584-1BY	NA-AR-5884-1B, Main circuit pc board ass'y <K/W>
	2301271Y	NPT-1301DG, Power transformer <K/W>		IA720585-1AY	NA-ETC-5885-1A, Secondary circuit pc board ass'y <P/W/T/A/K>
				IA720585-1BY	NA-ETC-5885-1B, Secondary circuit pc board ass'y <W>
				IA720586-1AY	NA-ETC-5886-1A, Tone control circuit pc board ass'y <P/W/A/T/K>
				IA720586-1BY	NA-ETC-5886-1B, Tone control circuit pc board ass'y <W>
				IA720587-1AY	NA-DIS-5887-1A, Display circuit pc board ass'y <D>
				IA720587-1BY	NA-DIS-5887-1B, Display circuit pc board ass'y <P>
				IA720587-1CY	NA-DIS-5887-1C, Display circuit pc board ass'y <T>
				IA720587-1DY	NA-DIS-5887-1D, Display circuit pc board ass'y <W>
				IA720587-1EY	NA-DIS-5887-1E, Display circuit pc board ass'y <K>
				IA720587-1FY	NA-DIS-5887-1F, Display circuit pc board ass'y <A>
				IA720588-1AY	NA-RF-5888-1A, Tuner circuit pc board ass'y <D>
				IA720588-1BY	NA-RF-5888-1B, Tuner circuit pc board ass'y <P>
				IA720588-1CY	NA-RF-5888-1C, Tuner circuit pc board ass'y <T>
				IA720588-1DY	NA-RF-5888-1D, Tuner circuit pc board ass'y <W>
				IA720588-1EY	NA-RF-5888-1E, Tuner circuit pc board ass'y <K>
				IA720588-1FY	NA-RF-5888-1F, Tuner circuit pc board ass'y <A>
				IA720589-1AY	NA-PS-5889-1A, Power supply circuit pc board ass'y <D>
				IA720589-1BY	NA-PS-5889-1B, Power supply circuit pc board ass'y <P>
				IA720589-1CY	NA-PS-5889-1C, Power supply circuit pc board ass'y <T>
				IA720589-1DY	NA-PS-5889-1D, Power supply circuit pc board ass'y <W>
				IA720589-1EY	NA-PS-5889-1E, Power supply circuit pc board ass'y <K>
				IA720589-1FY	NA-PS-5889-1F, Power supply circuit pc board ass'y <A>
				IA720590-1AY	NA-ETC-5890-1A, Video terminal pc board ass'y <D>
				IA720590-1BY	NA-ETC-5890-1B, Video terminal pc board ass'y <P>
				IA720590-1CY	NA-ETC-5890-1C, Video terminal pc board ass'y <T>
				IA720590-1DY	NA-ETC-5890-1D, Video terminal pc board ass'y <W>
				IA720591-1AY	NA-ETC-5891-1A, Headphone terminal pc board ass'y <D>
				IA720591-1BY	NA-ETC-5891-1B, Headphone terminal pc board ass'y <P>
				IA720591-1CY	NA-ETC-5891-1C, Headphone terminal pc board ass'y <T>
				IA720591-1DY	NA-ETC-5891-1D, Headphone terminal pc board ass'y <W>
				IA720591-1EY	NA-ETC-5891-1E, Headphone terminal pc board ass'y <K>
				IA720591-1FY	NA-ETC-5891-1F, Headphone terminal pc board ass'y <A>
				IA720592-1AY	NA-ETC-5892-1A, Video terminal pc board ass'y <D>
				IA720592-1BY	NA-ETC-5892-1B, Video terminal pc board ass'y <P>
				IA720592-1CY	NA-ETC-5892-1C, Video terminal pc board ass'y <T>
				IA720592-1DY	NA-ETC-5892-1D, Video terminal pc board ass'y <W>
				IA720593-1AY	NA-ETC-5893-1A, Primary terminal pc board ass'y
				IA720593-1BY	NA-ETC-5893-1B, Primary terminal pc board ass'y
				IA720593-1CY	NA-ETC-5893-1C, Primary terminal pc board ass'y
				IA720593-1DY	NA-ETC-5893-1D, Primary terminal pc board ass'y
				IA720593-1EY	NA-ETC-5893-1E, Primary terminal pc board ass'y
				IA720593-1FY	NA-ETC-5893-1F, Primary terminal pc board ass'y
				IA720594-1AY	NA-ETC-5894-1A, Volume circuit pc board ass'y <D>
				IA720594-1BY	NA-ETC-5894-1B, Volume circuit pc board ass'y <P/T/A/K>
				IA720594-1CY	NA-ETC-5894-1C, Volume circuit pc board ass'y <W>
				IA720594-1DY	NA-ETC-5894-1D, Volume circuit pc board ass'y <K>
				IA720594-1EY	NA-ETC-5894-1E, Volume circuit pc board ass'y <T>
				IA720594-1FY	NA-ETC-5894-1F, Volume circuit pc board ass'y <A>
				IA720595-1AY	NA-ETC-5895-1A, Rear amplifier pc board ass'y <D>
				IA720595-1BY	NA-ETC-5895-1B, Rear amplifier pc board ass'y <P/T/A/K>
				IA720595-1CY	NA-ETC-5895-1C, Rear amplifier pc board ass'y <W>
				IA720595-1DY	NA-ETC-5895-1D, Rear amplifier pc board ass'y <K>
				IA720595-1EY	NA-ETC-5895-1E, Rear amplifier pc board ass'y <T>
				IA720595-1FY	NA-ETC-5895-1F, Rear amplifier pc board ass'y <A>
				IA7205984	NCETC-58984, Holder for lead wire

EXPLoded VIEW

Model TX-SE500



NOTE: THE COMPONENTS IDENTIFIED BY MARK **Δ**
ARE CRITICAL FOR RISK OF FIRE AND
ELECTRIC SHOCK. REPLACE ONLY WITH
PART NUMBER SPECIFIED.

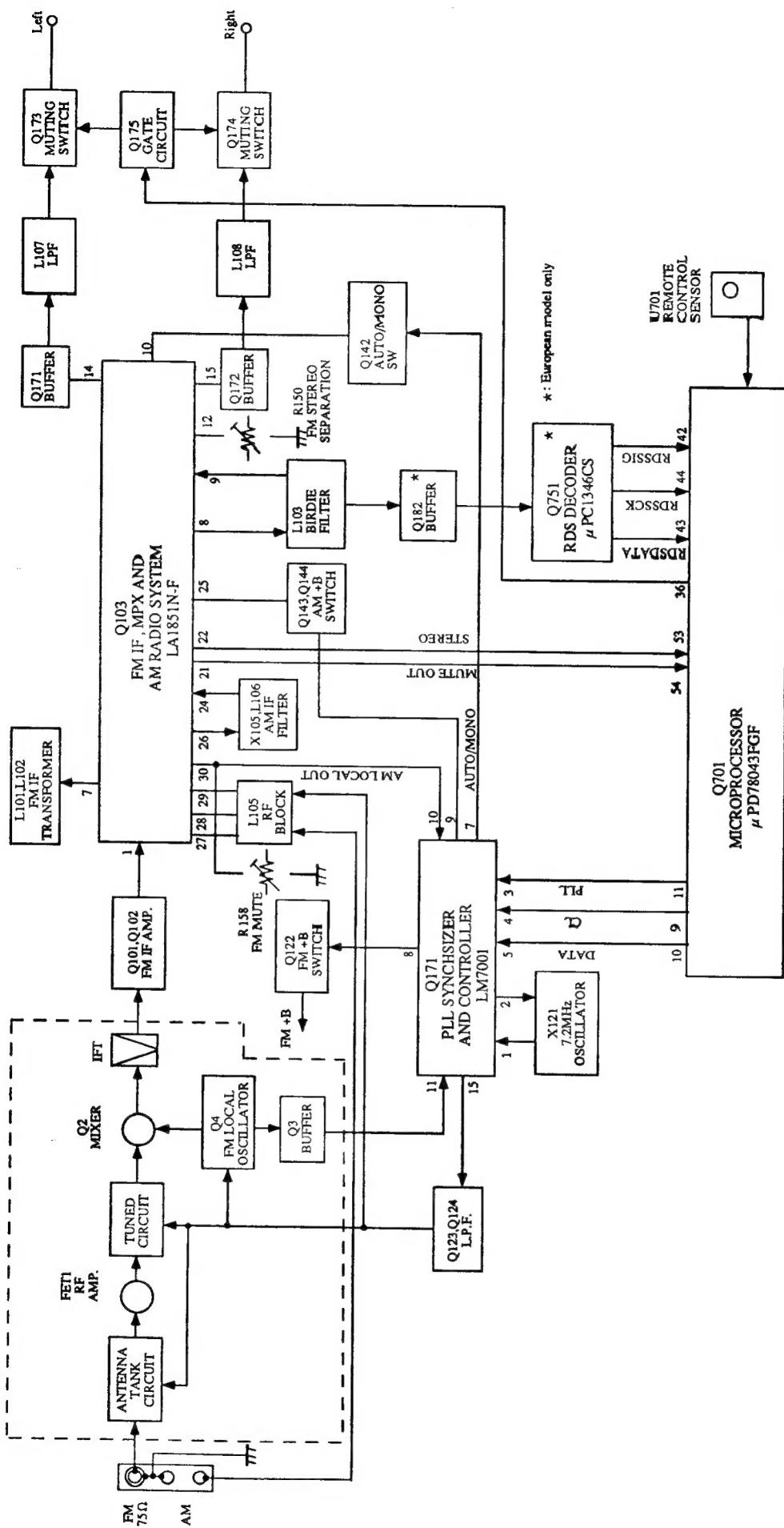
PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
3	27160373Y	Heatsink	P901	252164Y	SA-UL/T-237, Fuse <W>
4	801433	3SMSW-SW+14B(BC), Special screw	P902	252076	3.15A-SE-EAK, Fuse
5	838130088	3TTB+8B, Self-tapping screw	P903	252075	2.5A-SE-EAK, Fuse <P>
8	27141671	Retainer	P991, F992	252077	4A-SE-EAK, Fuse
11	27160376	Heatsink, S	P901	253193HIT	AS-CEE, Power supply cord <P>
13	27100320AY	Chassis	P901	253213WSE	AS-KS, Power supply cord <K>
19	27190503A	KGLS-8RF, Holder	P901	252233KAW	AS-CEE-2, Power supply cord <W>
20	27190266	KGLS-12RF, Holder	P904, P905	25051266	NSCT-2P1056, AC outlet <K>
24	28175225Y	Isolation plate	Q523, Q524	202843 or	2SC5242-O or
26	27110932Y	Front bracket 	Q1512	202842	2SC5242-R, Transistor
32	27190896	Front bracket <G>	Q525, Q526	202833 or	2SA1962-O or
33	27190470Y	KGLS-10S, Holder	Q1513	202832	2SA1962-R, Transistor
36	830440089	KGLS-18S, Holder	Q823, Q824	202923 or	2SC5196-O or
38	27300750	4TTC+8C(BC), Self-tapping screw	Q825, Q826	202922	2SC5196-R, Transistor
42	27175319Y	#2271, Bushing, cord		202913 or	2SA1939-O or
43	28141332Y	Leg		202912	2SA1939-R, Transistor
45	831430088	Cushion for leg		2301229Y	NPT-1287P, Power transformer <K/W>
51	28325456Y	3TTW-8B(BC), Self-tapping screw		2301271Y	NPT-1301DG, Power transformer <K/W>
53	28325493Y	Knob, Volume 	U1	1A721584-2Y	NAAR-5884-2, Main circuit pc board ass'y
54	28325454Y	Knob, Volume <G>	U2	1A721585-2Y	NAETC-5885-2, Secondary circuit pc board ass'y
55	28325494Y	Knob, Tone 	U3	1A721586-2Y	NAETC-5886-2, Tone control circuit pc board ass'y
56	28325452Y	Knob, Tone <G>	U4	1A721587-2AY	NADIS-5887-2A, Display circuit pc board ass'y <P>
59	28325495Y	Knob, Mic. 		1A721587-2BY	NADIS-5887-2B, Display circuit pc board ass'y <W>
71	28184663Y	Knob, Mic. <G>		1A721587-2CY	NADIS-5887-2C, Display circuit pc board ass'y <K>
72	28184682Y	Top cover 		1A721588-2AY	NARF-5888-2A, Tuner circuit pc board ass'y <P>
73	838430088	3TTB+8B(BC), Self-tapping screw 		1A721588-2BY	NARF-5888-2B, Tuner circuit pc board ass'y <W>
75	838230088	3TTB+8B(Ni), Self-tapping screw <G>		1A721589-2AY	NADIS-5889-2A, Power supply circuit pc board ass'y <P>
77	27122265Y	Rear panel <P>		1A721589-2AY	NADIS-5889-2B, Power supply circuit pc board ass'y <W>
78	27122267Y	Rear panel <W>		1A721589-2CY	NADIS-5889-2C, Power supply circuit pc board ass'y <K>
79	27122268Y	Rear panel <K>		1A721590-2AY	NAETC-5890-2A, Video terminal pc board ass'y <P>
81	83843010	W3x10F(BC), Washer		1A721590-2BY	NAETC-5890-2B, Video terminal pc board ass'y <W>
82	838230088	3TTB+8B(Ni), Nickel screw		1A721590-2CY	NAETC-5890-2C, Video terminal pc board ass'y <K>
84	272111862Y	Front panel 		1A721591-2AY	NAETC-5891-2A, Primary terminal pc board ass'y <P>
85	272111907Y	Front panel <G>		1A721591-2BY	NAETC-5891-2B, Primary terminal pc board ass'y <W>
86	28132544Y	Badge 		1A721593-2AY	NAETC-5893-2B, Primary terminal pc board ass'y <P>
87	28132545Y	Badge <G>		1A721593-2BY	NAETC-5893-2B, Primary terminal pc board ass'y <W>
88	27215273Y	Decorative frame 		1A721592-2AY	NAETC-5894-2, Volume circuit pc board ass'y <P/K>
89	27215275Y	Decorative frame <G>		1A721594-2AY	NAAF-5894-2A, Volume circuit pc board ass'y <W>
90	28191732AY	Clear plate 		1A721595-2AY	NAAF-5895-2, Rear amplifier pc board ass'y <P/K>
91	28191778Y	Clear plate <G>		1A721595-2BY	NAAF-5895-2B, Rear amplifier pc board ass'y <W>
92	28325451Y	Knob, power 		25135984	NCETC-5984-2, Holder for lead wire
93	28325496Y	Knob, power <G>		1A721596-1Y	NADG-5896-1, Digital circuit pc board ass'y
94	27267935Y	Guide, power 		1A721597-1Y	NAETC-5897-1, Mic. terminal pc board ass'y
95	27267939Y	Guide, power <G>			
D910	22380038	△ RBV602	U13		
E801	260208	Binder	U14		
E802	2047352012Y	NCFC7-252012, Flexible flat cable	U15		
E808	223024	△ AC238, Isolation sheet			
E815	260208Y	Wire tie			

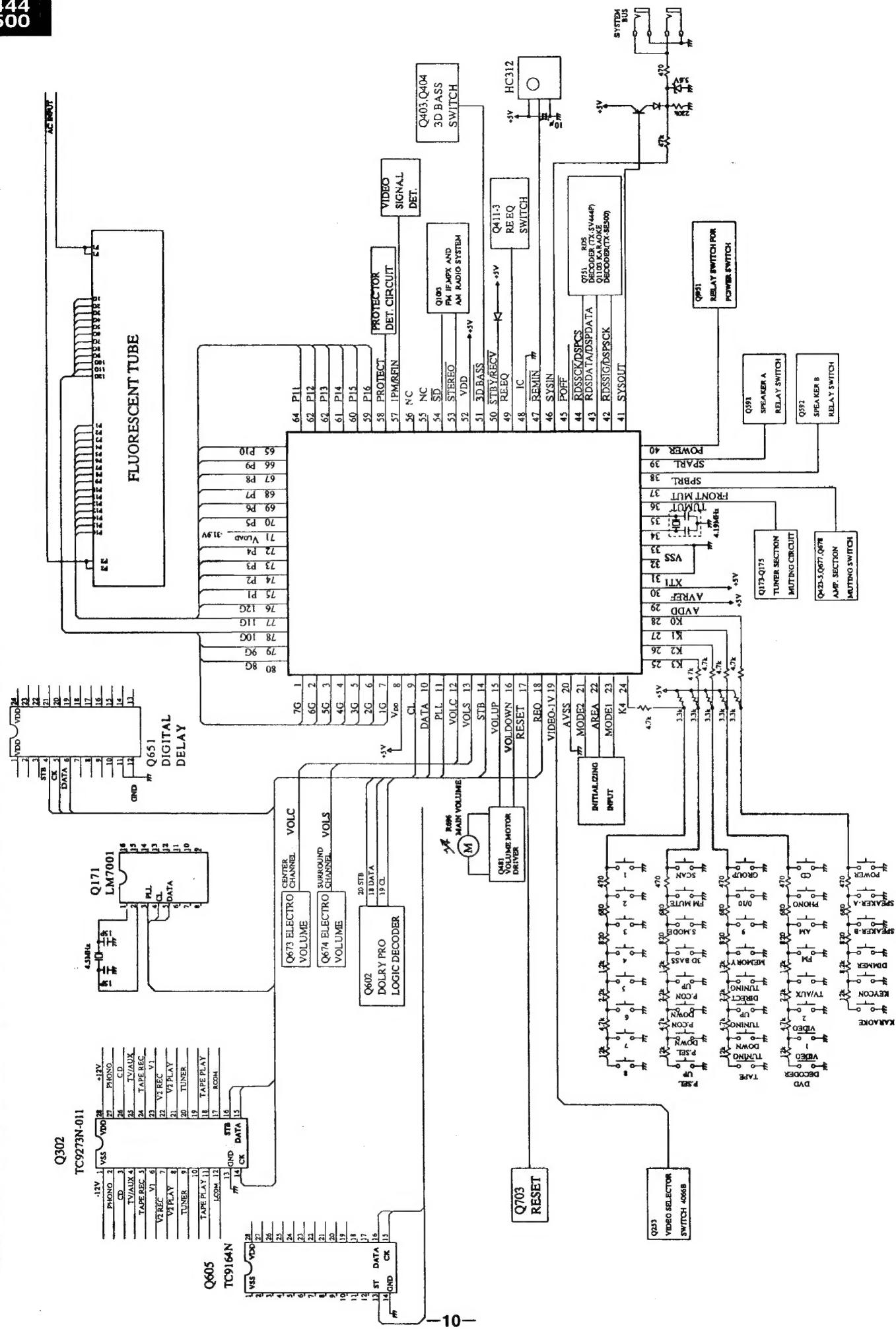
NOTES:

: Black model only
<G>: Golden model only
<P>: Asian model only
<W>: Taiwanese model only
<K>: Korean model only

OTHER MODELS



MICROPROCESSOR CONNECTION DIAGRAM



MICROPROCESSOR TERMINAL DESCRIPTION

Pin No.	Function	Descriptions
1~7	7G~1G	Grid output terminals
8	VDD	Positive power supply terminal (+5V)
9	CL	Clock output terminal.
10	DATA	Data output terminal.
11	PLL	Chip enable output terminal for PLL IC
12	VOLC	Clock output terminal for electro volume of center channel.
13	VOLS	Clock output terminal for electro volume of surround channels.
14	STB	Strobe output terminal
15	VOLUP	Volume control output terminal
16	VOLDOWN	Volume control output terminal
17	RESET	System reset input terminal
18	REQ	Request terminal for Digital delay and Dolby ICs
19	VIDEO-1V	Video signal selector terminal
20	AVSS	Ground terminal for A/D converter
21	MODE2	Initializing input terminal
22	AREA	Initializing input terminal for region of frequency range
23	MODE1	Initializing input terminal
24	K4~K0	Key input terminals
29	AVDD	Analog power supply terminal (+5V)
30	AVREF	Reference voltage input terminal for A/D converter
31	XT1	Crystal connection terminals for subsystem clock
32	XT2	Not used.
33	VSS	Ground terminal
34	X1	Crystal connection terminals for main system clock
35	X2	Connect the 4.19MHz ceramic oscillator.
36	TUMUT	Muting output terminal for tuner section
37	FRONTMUT	Muting output terminal for amplifier of front channels.
38	SPBRL	Speaker relay B control output terminal
39	SPARL	Speaker relay A control output terminal
40	POWER	Power source control output terminal
41	SYSOUT	System code output terminal
42	RDSSIG	Detection input terminal for RDS broadcast
43	RDSSDATA	Data input terminal for RDS broadcast
44	RDSSCK	Clock input terminal from RDS demodulator
42	DSPSCK	Clock output terminal for KARAOKE IC.
43	DSPDATA	Data output terminal for KARAOKE IC.

Pin No.	Function	Descriptions
44	DSPCS	Chip select output terminal for KARAOKE IC.
45	POFF	Power failure detection input terminal
46	SYSIN	system code input terminal
47	REMIN	Remote control signal input terminal
48	IC	Internal connection terminal
49	RE-EQ	RE-EQ control output terminal
50	STBY/RECV	STANDBY/RECEIVED indication output terminal
51	3DB	3-D bass control output terminal
52	VDD	Power supply terminal (+5V)
53	STEREO	Stereo broadcast detection input terminal
54	SD	Broadcast detection input terminal
55,56	NC	Not used.
57	IPM	Audio IPM operation input terminal
58	PROTECT	Detection input terminal for protection circuit
59	P16~P5	Segment output terminals
71	VLOAD	Pull-down resistor connection terminal for FIP controller and driver
72	P4~P1	Segment output terminals
76~80	12G~8G	Grid output terminals

Volume control output

	15	16
Stop	H	H
Up	H	L
Down	L	H

FM band

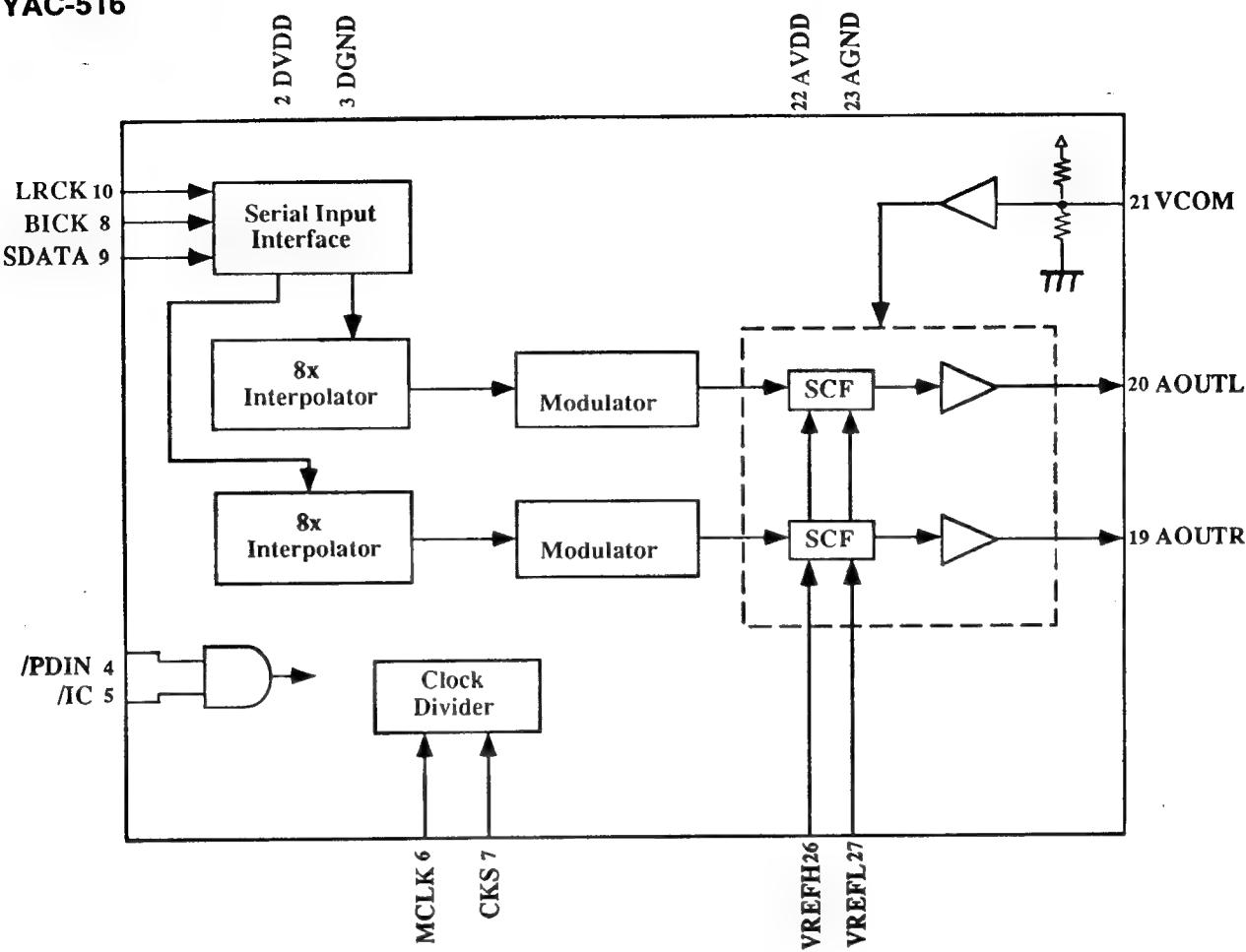
BAND1	BAND0	Region	Frequency Range	Channel space
0	0	Europe	87.50~108.00MHz	50kHz
0	1	Saudi	87.50~108.00MHz	50kHz
1	0	Japan	76.0~90.0MHz	100kHz
1	1	U.S.A	87.5~108MHz	100kHz

AM band

BAND1	BAND0	AM10K	Region	Frequency Range	Channel space
0	0	0	Europe	522~1611kHz	9 kHz
0	1	0	Saudi	531~1602kHz	9 kHz
1	0	0	Japan	522~1629kHz	9 kHz
1	1	0	U.S.A	522~1629kHz	9 kHz
1	1	1	U.S.A	530~1710kHz	10 kHz

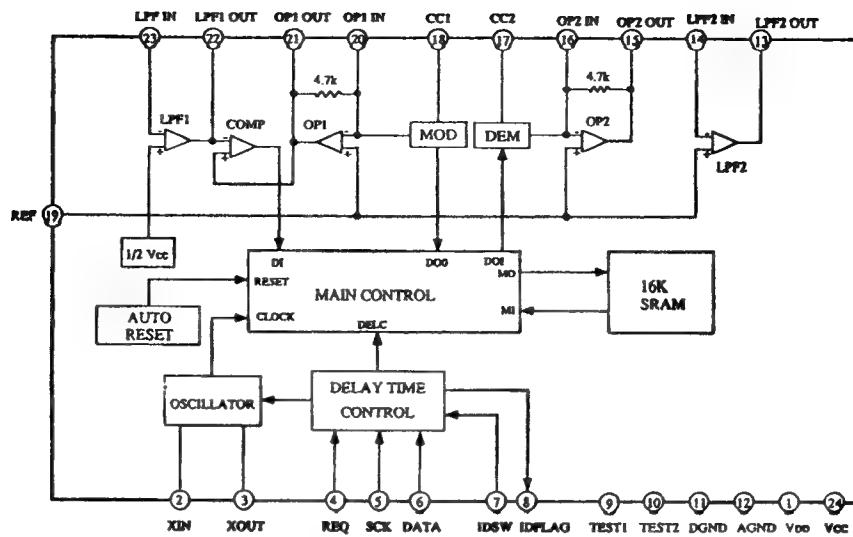
IC BLOCK DIAGRAM AND DESCRIPTIONS

YAC-516

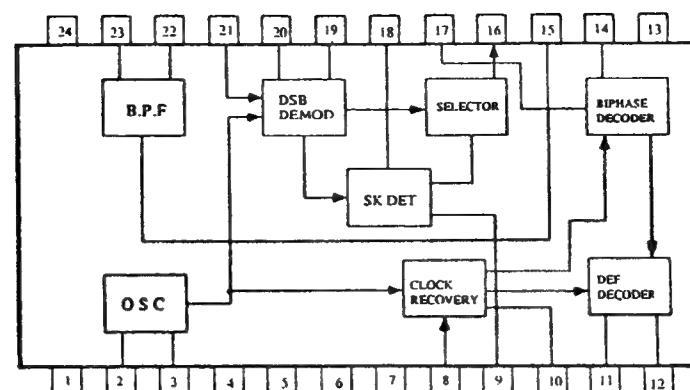


Pin No.	Terminal	I/O	Function
1	TST 1	1	Test terminal
2	DVDD	—	Power supply terminal for digital section
3	DGND	—	Ground terminal for digital section
4	/PDIN	I	Power down mode input terminal
5	/IC	I	Initializing clear input terminal
6	MCLK	I	Master clock input terminal
7	CKS	I	Clock select terminal
8	BICK	I	Serial bit clock input terminal
9	SDATA	I	Serial data input pin
10	LRCK	I	Serial L/R clock input terminal
19	AOUTR	OA	Right channel analog output terminal
20	AOUTL	OA	Left channel analog output terminal
21	VCOM	OA	Common voltage terminal
22	AVDD	—	Power supply terminal for analog section
23	AGND	—	Ground terminal for analog section
26	VREFH	IA	Reference voltage input terminal when high level
27	VREFL	IA	Reference voltage input terminal when low level
28	TST 2	O	Test terminal

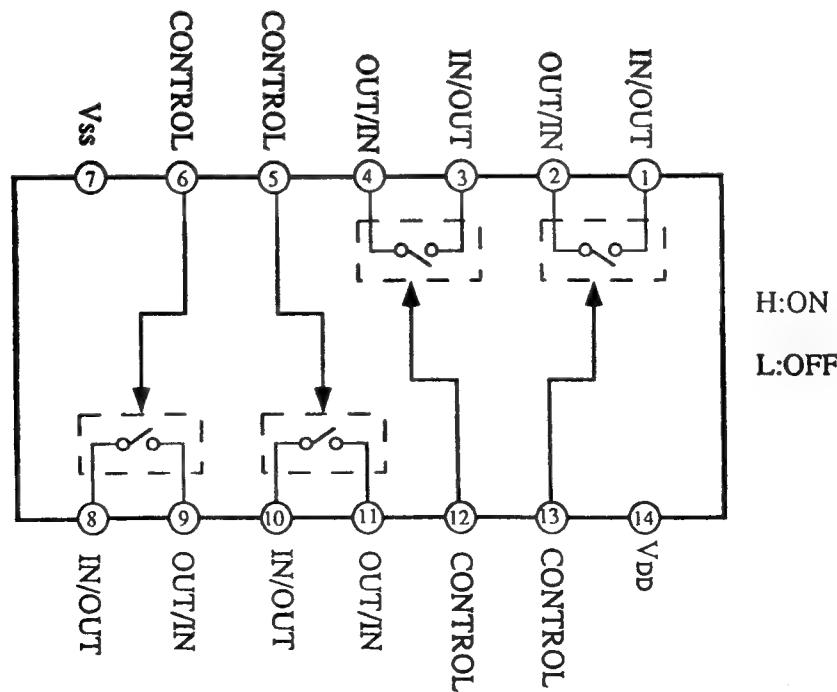
NJU9702D (Digital Delay)



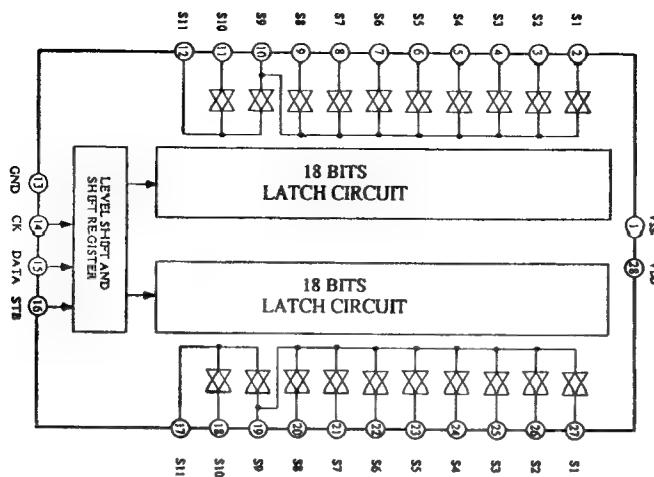
Pin No.	Mark	Function	I/O	Description
1	VDD	Digital power supply	-	
2	XIN	Resonator input	I	Connect the 2MHz ceramic resonator
3	XOUT	Resonator output	O	
4	REQ	Request	I	Data request input
5	SCK	Shift lock	I	Serial data shift clock input
6	DATA	Data	I	Serial data input
7	IDSW	ID switch	I	External input of 4th bit of ID code
8	IDFLAG	ID flag	O	Data input confirmation pulse and serial data output
9	TEST1	Test 1	-	Normal mode when low level
10	TEST2	Test 2	-	Normal mode when low level
11	D GND	Digital ground	-	
12	A GND	Analog ground	-	
13	LPF2 OUT	LPF filter 2 output	O	
14	LPF2 IN	LPF filter 2 input	I	
15	OP2 OUT	Operation amp. 2 output	O	
16	OP2 IN	Operation amp. 2 input	I	
17	CC2	Current control 2	-	Demodulation ADM control
18	CC1	Current control 1	-	Modulation ADM control
19	REF	Reference	-	Analog reference voltage=1/2VCC
20	OP1 IN	Operation amp. 1 input	I	
21	OP1 OUT	Operation amp. 1 output	O	
22	LPF1 OUT	LPF filter 1 output	O	
23	LPF1 IN	LPF filter 1 input	I	
24	VCC	Analog power supply	-	

μPC1346CS (RDS Decoder)

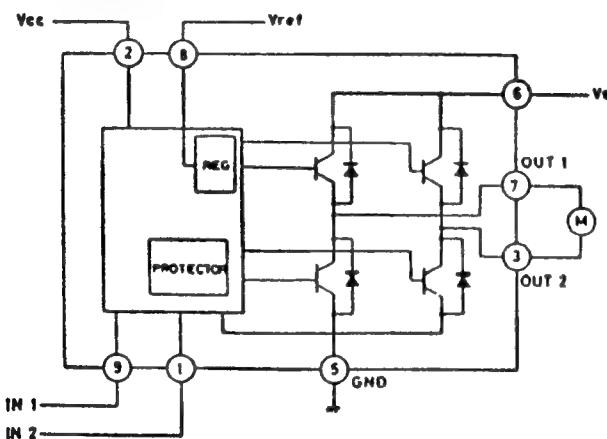
No.	Terminal	Description	No.	Terminal	Description
1	Vcc	Supply voltage for the digital circuit	13	GND	Ground for the analog circuit
2	OSC IN	Resonator input	14	INTEG	Integrating filter terminal
3	OSC OUT	Resonator output	15	BPF ADJ	Adjustment fc of band pass filter
4	GND	Ground for the digital circuit	16	PSK OUT	Biphase signal output
5	TEST1	Test input	17	PSK IN	Biphase decoder input
6	TEST2	Test input	18	LPF SK	Low pass filter for the detection SK
7	OP.CTL	Control input of the operation stop	19	LPF Q	Low pass filter for the crossed detector
8	S/L CTL	Mode control input of the synchronizing detection	20	LPF I	Low pass filter for the synchronizing detector
9	SK OUT	SK detection output	21	DSB IN	DSB demodulator circuit input
10	RDS OUT	RDS synchronizing detection output	22	BPF OUT	Band pass filter output
11	CLOCK OUT	Bit rate clock output	23	BPF IN	Band pass filter input
12	DATA OUT	RDS data output	24	Vcc	Supply voltage for analog circuit

LC4966 (Analog Switch)

TC9273N-010 (Analog Switch)



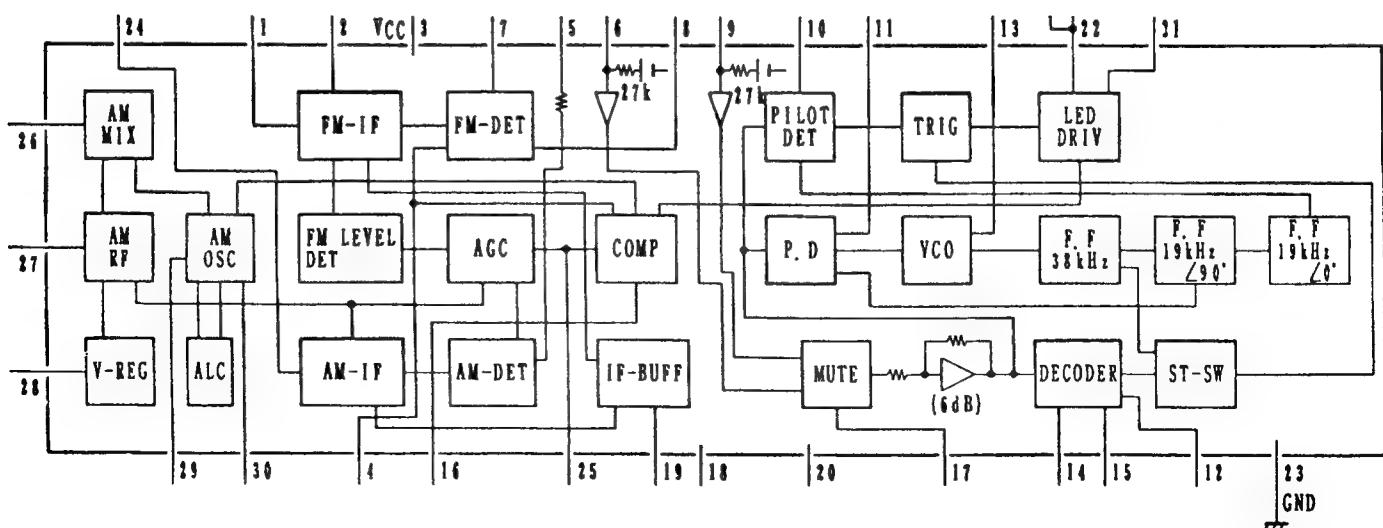
TA7291S (Volume driver)



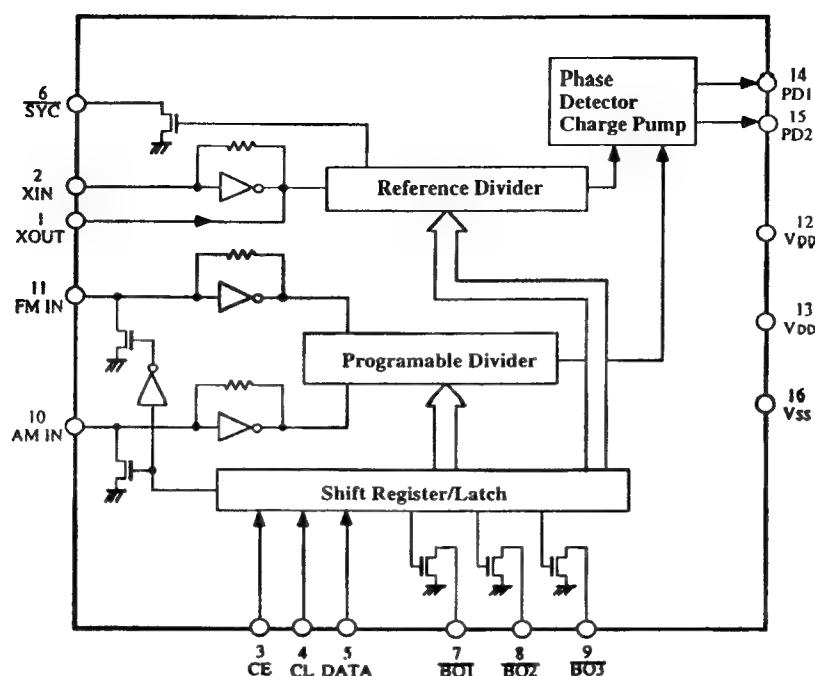
INPUT	OUTPUT	MODE			
		IN 1	IN 2	OUT 1	OUT 2
0	0	∞	∞	STOP	
1	0	H	L	CW/CCW	
0	1	L	H	CCW/CW	
1	1	L	L	BRAKE	

CCW: Counter clockwise direction
CW: Clockwise direction

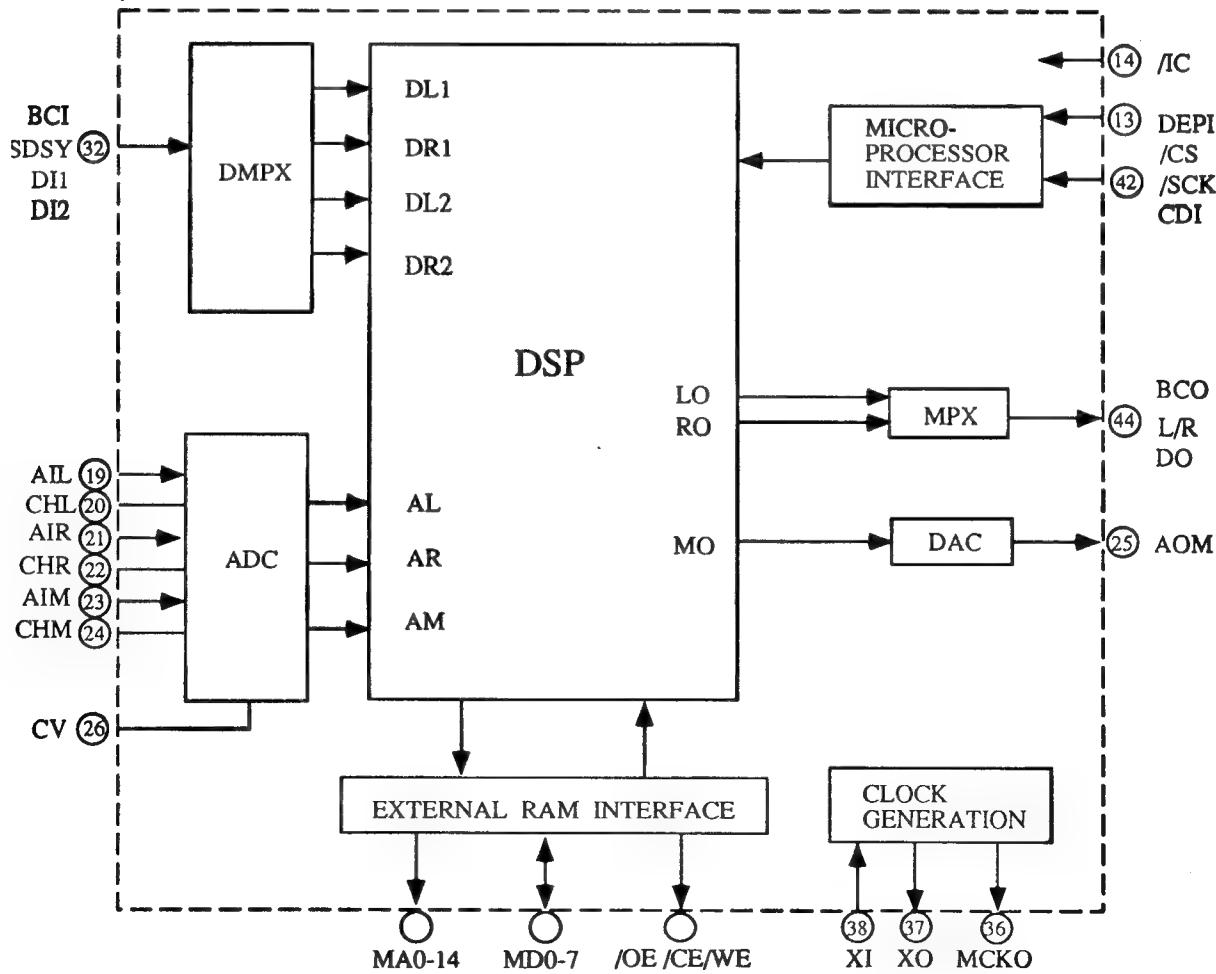
LA1851N (AM, FM IF and MPX)



LM7001 (PLL Frequency Synthesized IC)



YSS240-F (Karaoke Decoder)



ADJUSTMENT PROCEDURES

Preparation

1. Input

FM mono: 1kHz, 75kHz devi., 60dB/ μ V

FM stereo: 1kHz, 67.5kHz devi., 60dB/ μ V

Pilot signal 19kHz 7.5kHz devi.

AM: 400Hz, 30% mod.

1.FM ADJUSTMENT

Item	Step	Connection of instrument	FM SG output	Stereo modulator output	Tuning frequency	Output indicator	Adjustment point	Adjust for	Remarks
FM IF/RF	1	Fig.1	99.0MHz 1kHz 75kHz devi. 65dBf(60dB)	—	99.0MHz	DC voltmeter	L101	$0 \pm 20mV$	FM MUTE/MODE switch:ON/AUTO Repeat the steps 1 and 3 until no further adjustment is necessary.
	2					AC voltmeter	IFT on the front end	Maximum	
	3					Distortion analyzer	L102	Minimum	
Stereo Distortion		Fig.2	99.0MHz Ext. mod.65dBf(60dB)	Channel L or R 1kHz	99.0MHz	Distortion analyzer	IFT on the front end	Minimum	FM MUTE/MODE switch:ON/AUTO Don't turn more than $\pm 180^\circ$
Stereo Separation		Fig.2	99.0MHz Ext. mod.65dBf(60dB)	Channel L or R 1kHz	99.0MHz	Oscilloscope	R150	Maximum separation	
Muting Level		Fig.1	99.0MHz 19.2dBf(14dB)	—	99.0MHz	Oscilloscope	R158	Signal output	
RDS		Fig.3	99.0MHz Ext. mod.60dB	RDS data or 57kHz 3% devi.	99.0MHz	Oscilloscope	R798	Maximum	European model only

2.AM ADJUSTMENT

120V model

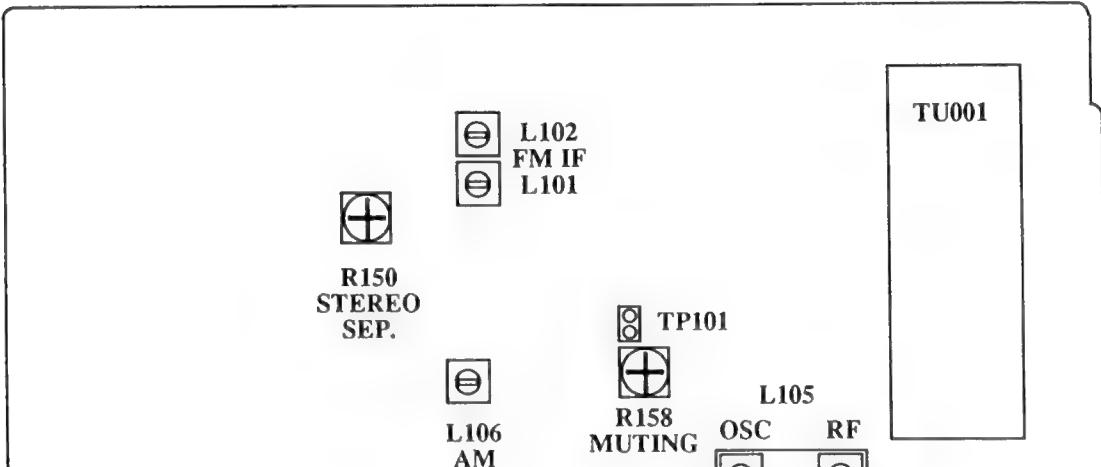
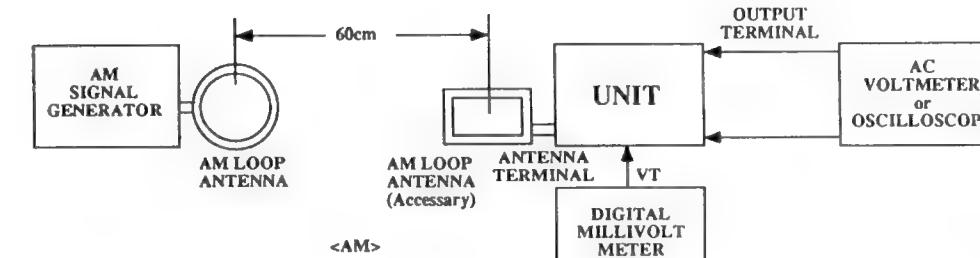
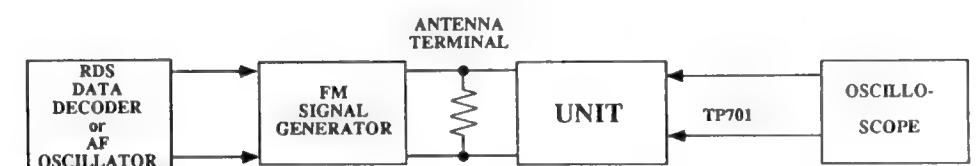
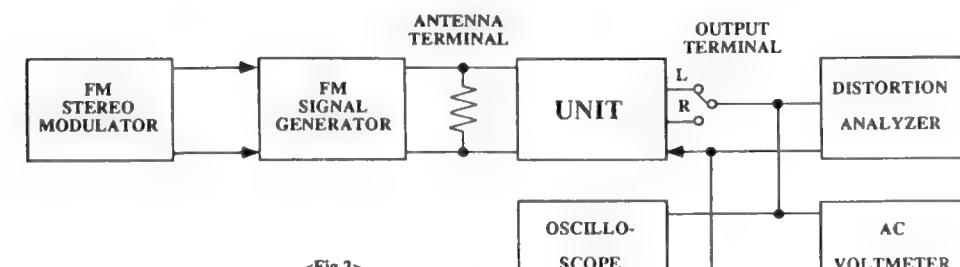
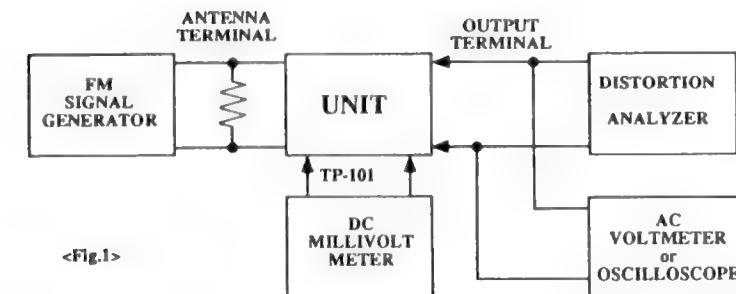
Step	AM SG output	Tuning Frequency	Output Indicator	Adjustment point	Adjust for
1		530kHz	Digital DC voltmeter	OSC coil on RF block L105	$1.3 \pm 0.2V$
2	600kHz 400Hz 30% mod. 60dB/m	600kHz	AC voltmeter	RF coil on RF block L105	Maximum
3	990kHz 400Hz 30% mod. 60dB/m	990kHz	AC voltmeter	L106	Maximum

230V and Worldwide models

Step	AM SG output	Tuning Frequency	Output Indicator	Adjustment point	Adjust for
1		522kHz or 531kHz	Digital DC voltmeter	OSC coil on RF block L105	$1.3 \pm 0.2V$
2	603kHz 400Hz 30% mod. 60dB/m	603kHz	AC voltmeter	RF coil on RF block L105	Maximum
3	999kHz 400Hz 30% mod. 60dB/m	999kHz	AC voltmeter	L106	Maximum

Reference Specification
FM tuned voltage: 87.50MHz ~ 108.00MHz
More than 1.2V ~ Less than 10V
AM tuned voltage: 530kHz ~ 1710kHz
 $1.3 \pm 0.2 \sim$ Less than 9.0V

Reference Specification
FM tuned voltage: 87.50MHz ~ 108.00MHz
More than 1.2V ~ Less than 10V
AM tuned voltage: 522kHz ~ 1611kHz
 $1.3 \pm 0.2 \sim$ Less than 9.0V
(230V model)
AM tuned voltage: 531kHz ~ 1602kHz
 $1.3 \pm 0.2 \sim$ Less than 9.0V
(Worldwide model)



Adjustment points

A

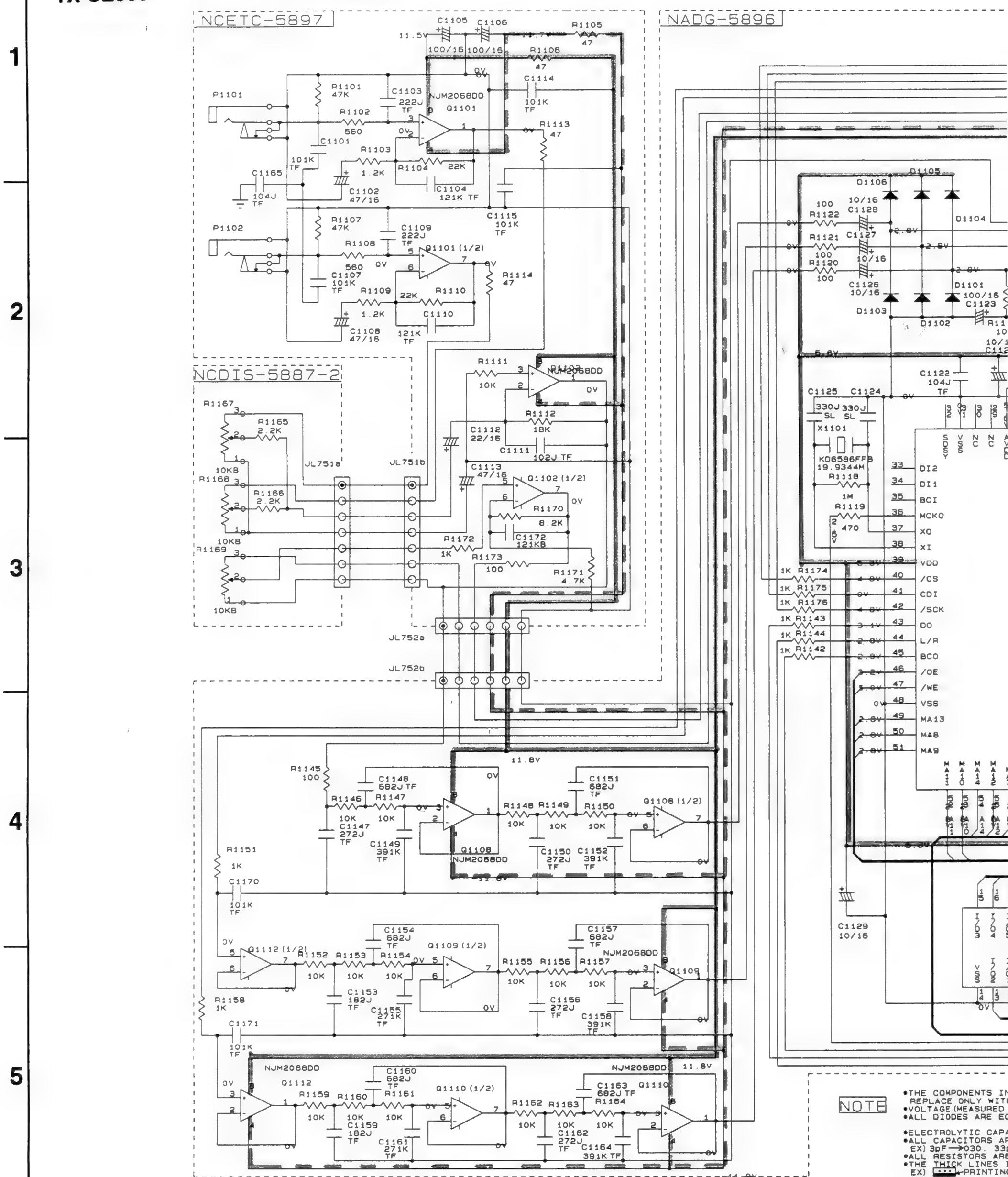
B

C

D

SCHEMATIC DIAGRAM

TX-SE500



NOTE

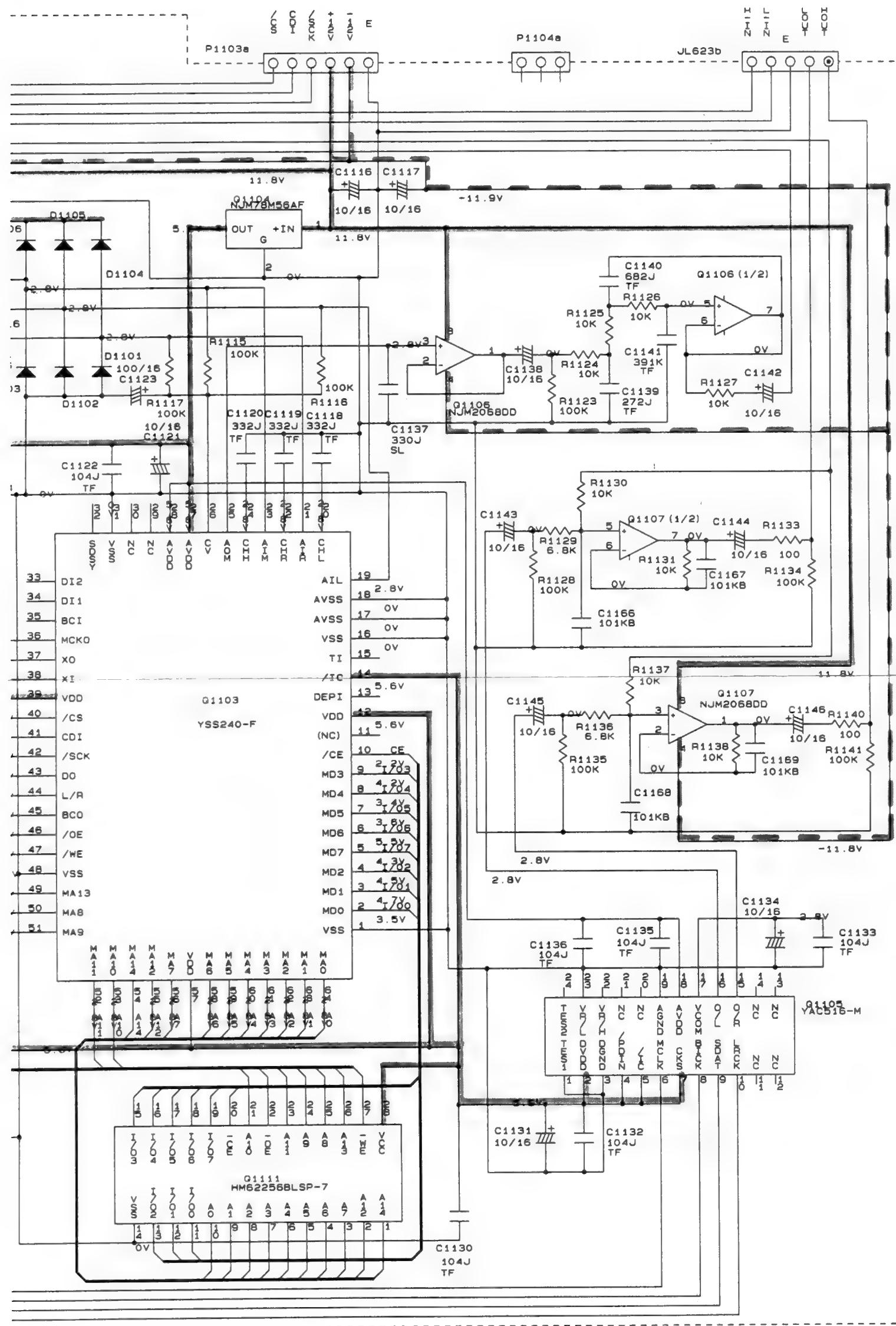
- THE COMPONENTS IN
REPLACE ONLY WITH
- VOLTAGE (MEASURED IN
ALL DIODES ARE EG)
- ELECTROLYTIC CAPA
• ALL CAPACITORS ARE
EX) 3PF → 030. 33PF
- ALL RESISTORS ARE
• THE THICK LINES IN
EX) [REDACTED] PRINTING
- CIRCUIT IS SUBJECT

D

8

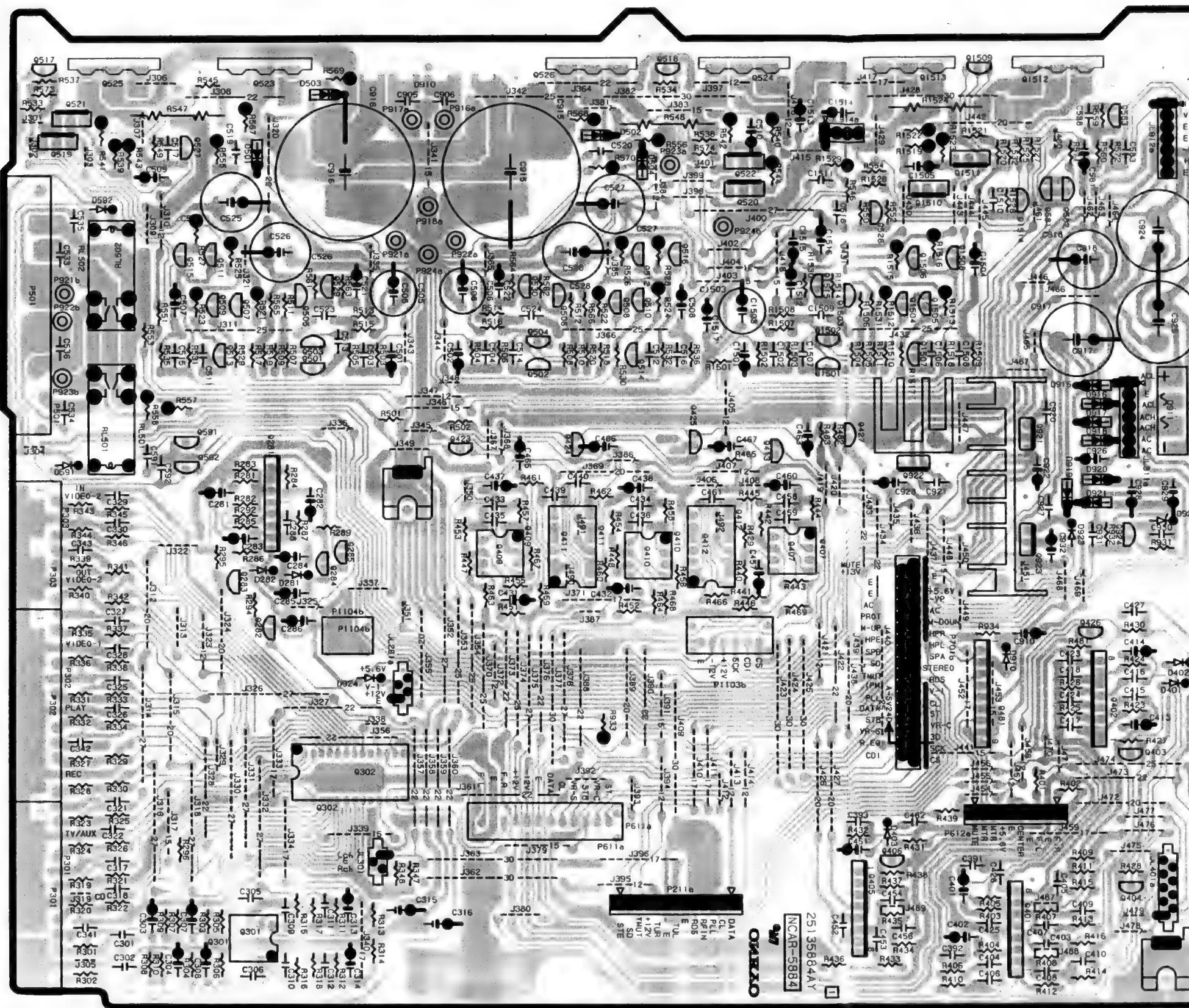
F

G

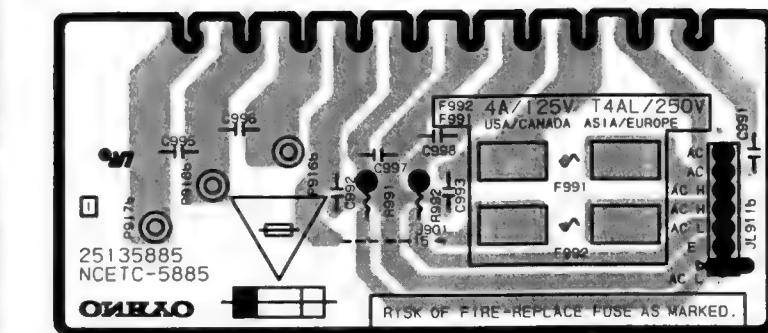


- THE COMPONENTS IDENTIFIED BY MARK  ARE CRITICAL FOR SAFETY.
REPLACE ONLY WITH PART NUMBER SPECIFIED.
- VOLTAGE (MEASURED WITH VOLTMETER)  IS DC VOLTAGE. (NO INPUT SIGNAL)
- ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
- ELECTROLYTIC CAPACITORS () ARE IN μ F/V.
ALL CAPACITORS ARE IN pF/50V UNLESS OTHERWISE NOTED.
EX) 3pF \rightarrow 030. 33pF \rightarrow 330. 330p \rightarrow 331. 0.033uF \rightarrow 333.
- ALL RESISTORS ARE IN OHMS 1/8WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES IN PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
EX)  PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT

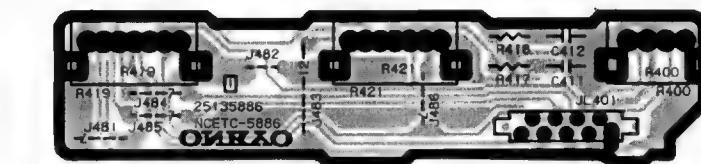
PRINTED CIRCUIT BOARD VIEW FROM BOTTOM SIDE



MAIN CIRCUIT PC BOARD

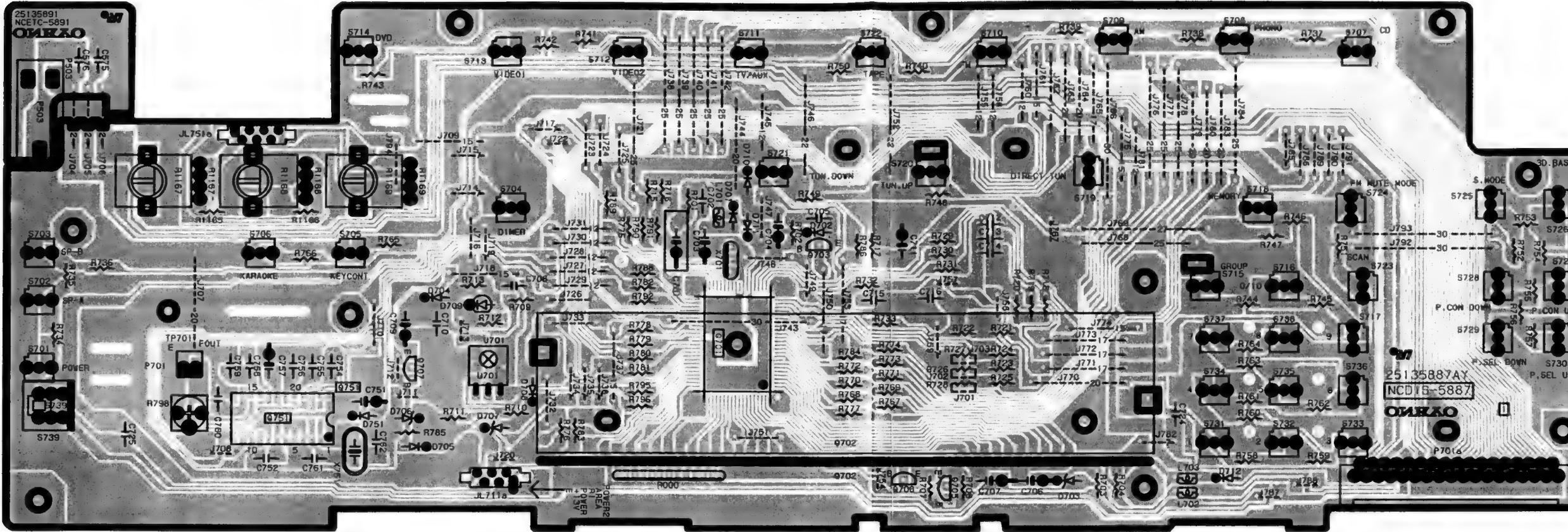


SECONDARY CIRCUIT PC BOARD

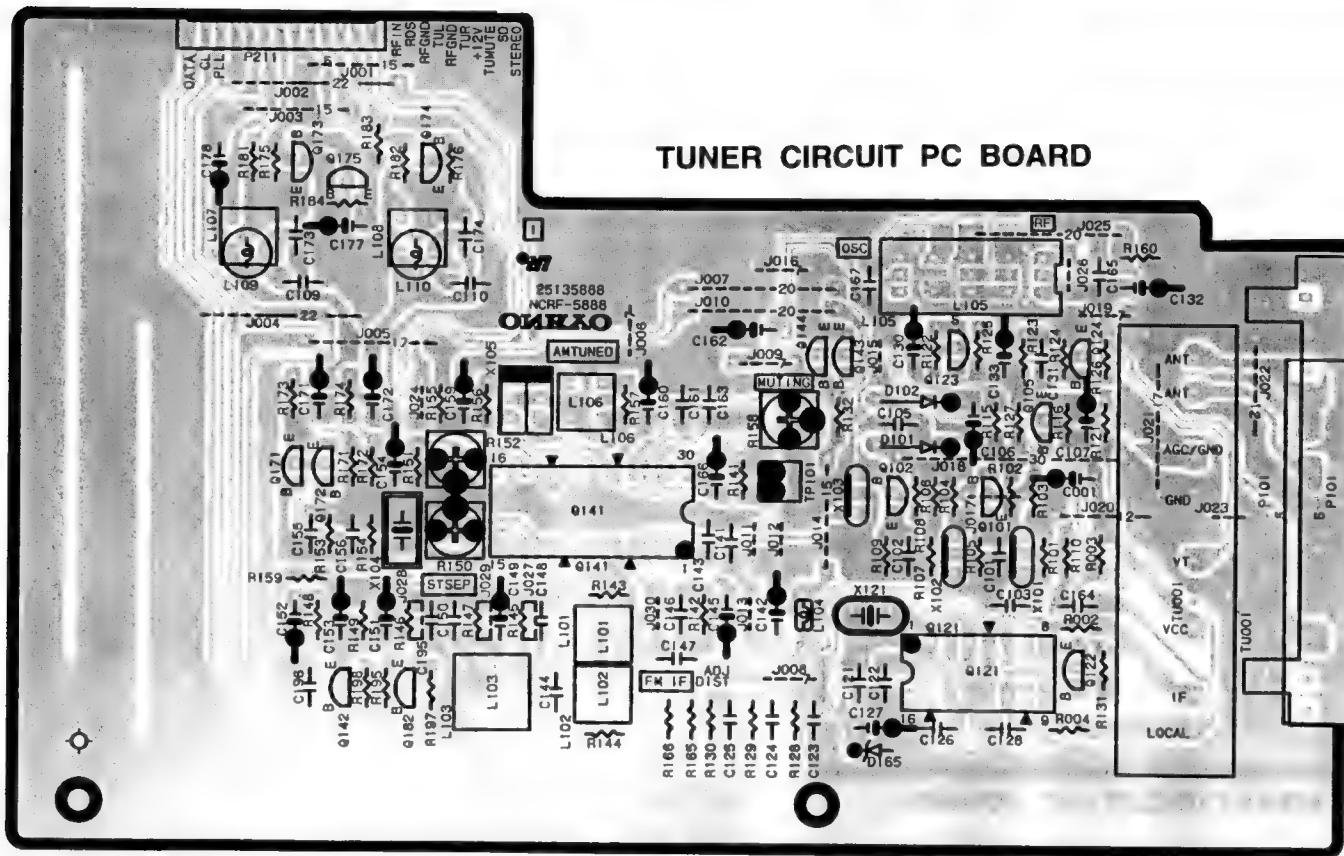


TONE CONTROL CIRCUIT PC BOARD

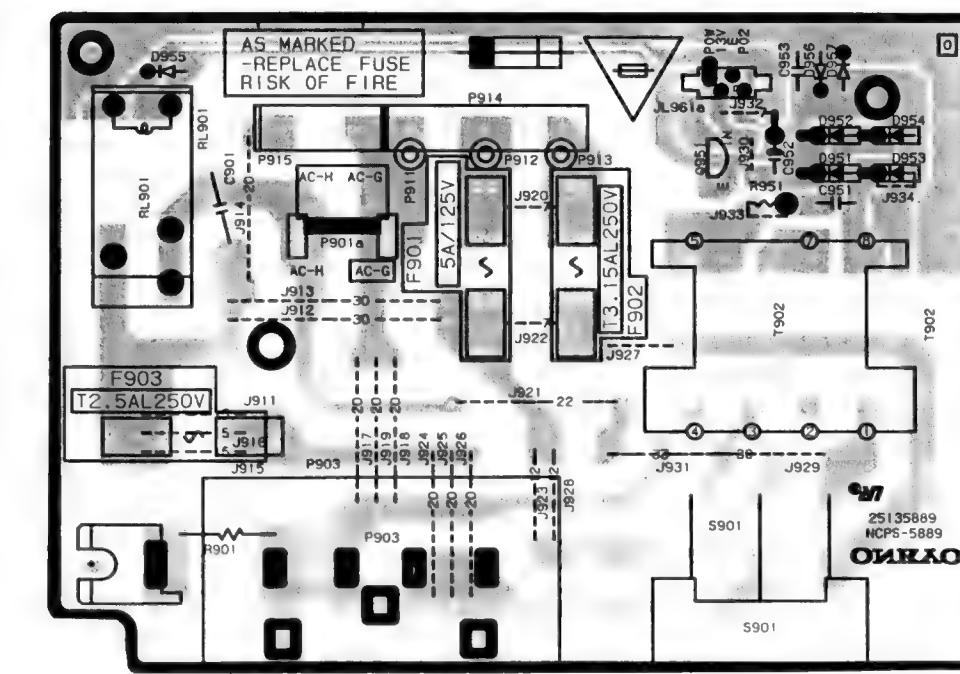
HEADPHONE TERMINAL PC BOARD



DISPLAY CIRCUIT PC BOARD

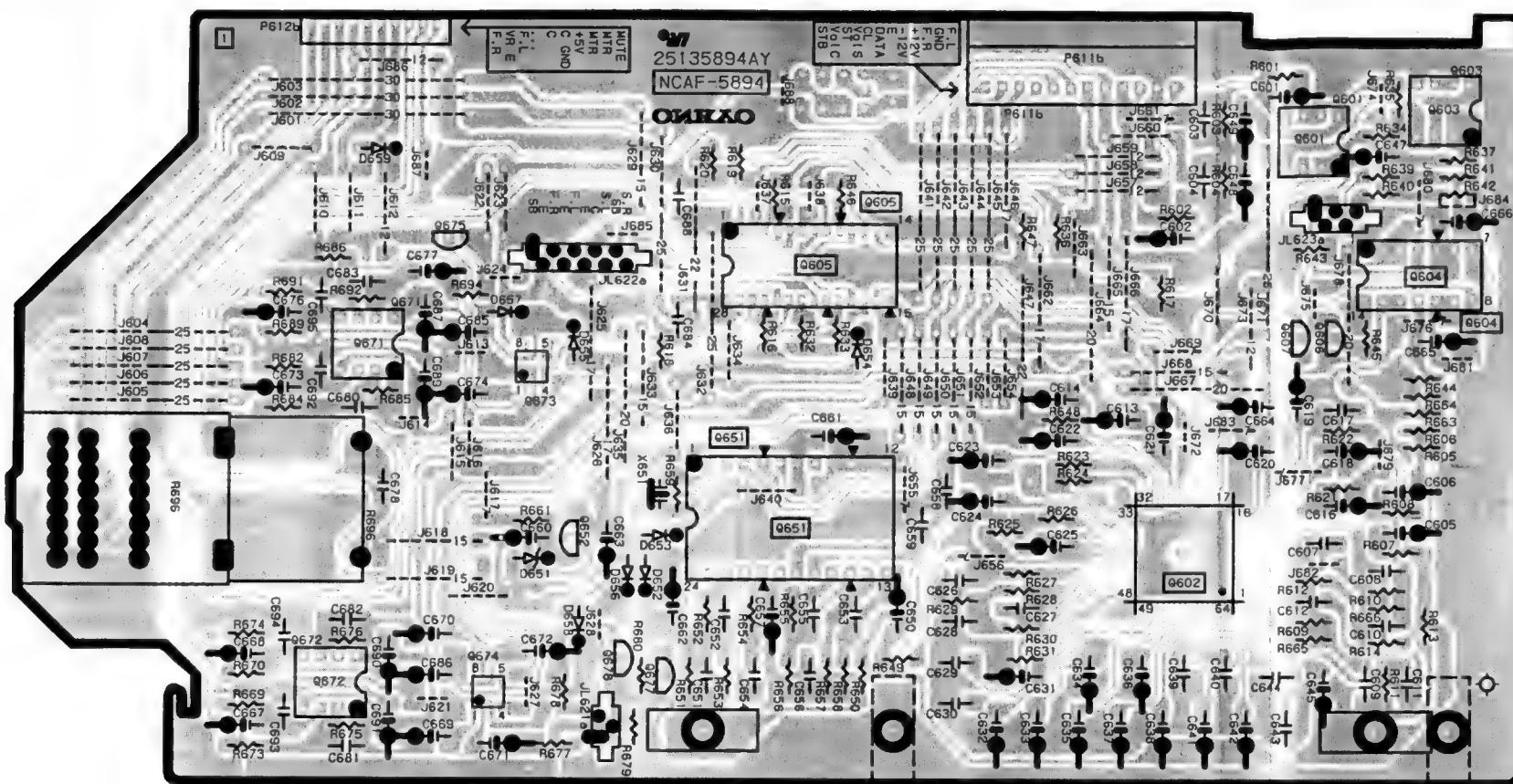


TUNER CIRCUIT PC BOARD



POWER SUPPLY CIRCUIT PC BOARD

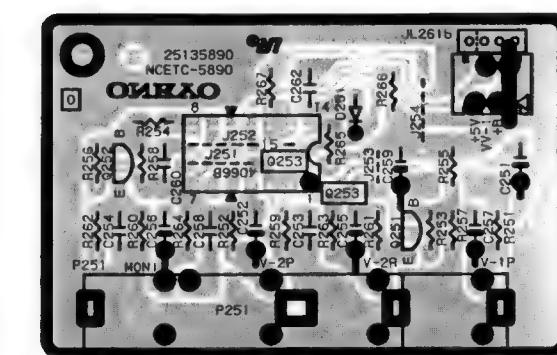
PRINTED CIRCUIT BOARD VIEW FROM BOTTOM SIDE



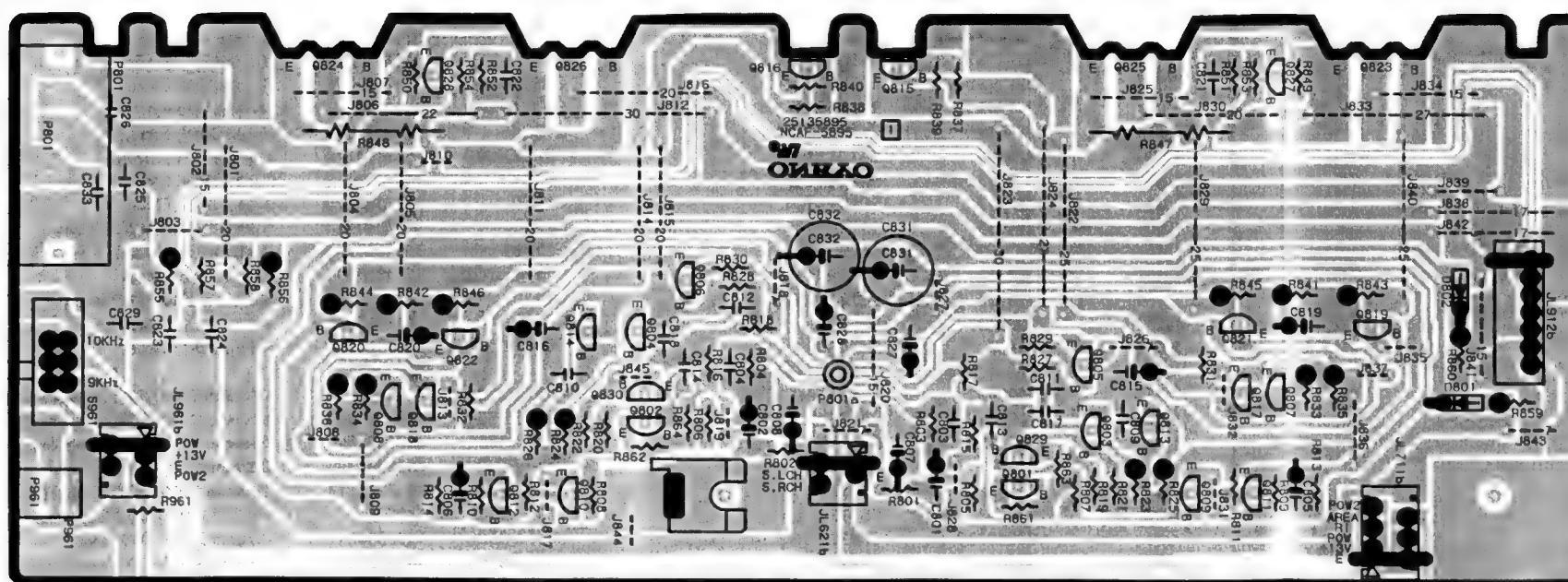
VOLUME CIRCUIT PC BOARD



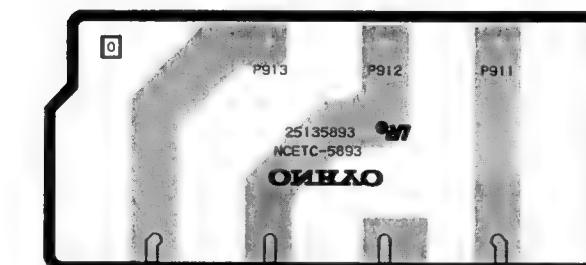
VIDEO TERMINAL PC BOARD



VIDEO TERMINAL PC BOARD

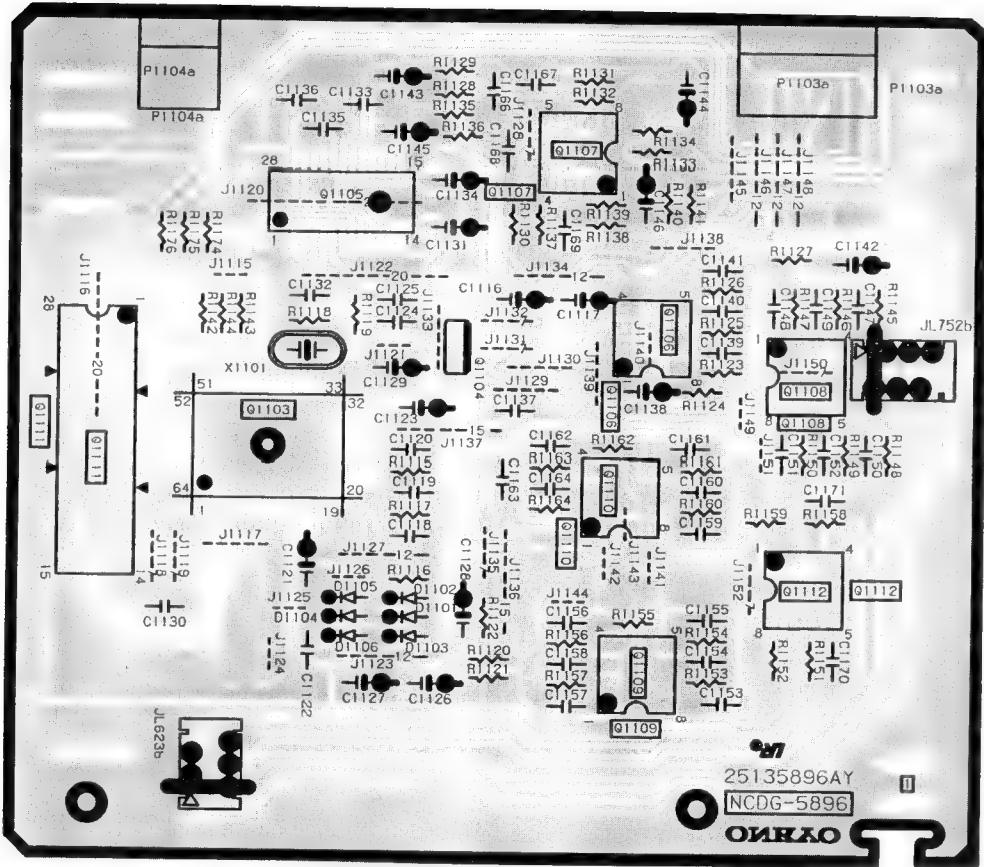


REAR AMPLIFIER PC BOARD

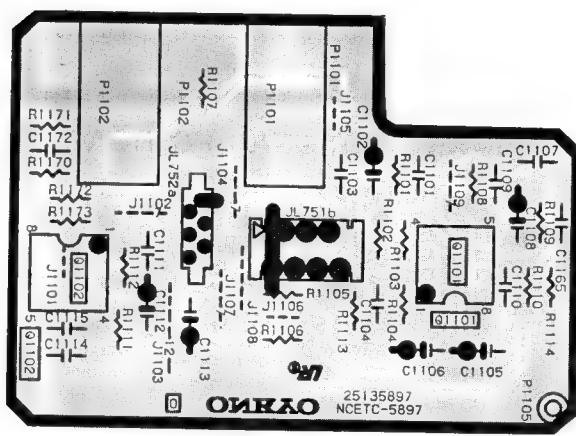


PRIMARY TERMINAL PC BOARD

MODEL TX-SE500 ONLY



DIGITAL CIRCUIT PC BOARD



MIC. TERMINAL PC BOARD

CIRCUIT BOARD-PARTS LIST

MAIN CIRCUIT PC BOARD (NAAR-5884-1A/1B/2)

CIRCUIT NO. PART NO. DESCRIPTION

ICs		
Q281	22240293	NJM4558L-D
Q301	222502	NJM4558D-X
Q302	22240881	TC9273N-010
Q401, Q402	22240250	NJM2068L-D
Q405	22240250	NJM2068L-D
Q407	222956	NJM2068D-D
Q409, Q410	222956	NJM2068D-D
Q411, Q412	22240025	LC4966
Q481	22240239	TA7291S
Q921	222780125NEC	MPC78M12AHF
Q922	222790125	79M12HF
Q923	222780565JRC	NJM78M56FA
Transistors		
Q282	2212600	DTA124ES
Q283	2213816	2SD1450-T
Q284	2213160	DTC124ES
Q285	2215240	DTA114TS
Q403, Q404	2211945	2SK246-GR
Q406	2211945	2SK246-GR
Q413, Q426	2213090	DTA114YS
Q423, Q425	2213631	RN1241-A
Q427	2213510	DTA114ES
Q501~Q506	2211733 or 2211732	* 2SC1845-E or * 2SC1845-F
Q507~Q510	2211353	2SA949-O
Q511, Q512	2211633	2SC2229-O
Q513, Q514	2211353	2SA949-O
Q515, Q516	2211633	2SC2229-O
Q517, Q518	2213284	2SC1740S-R
Q519, Q520	2203010	2SC5171
Q521, Q522	2203000	2SA1930
Q523, Q524	2202843 or 2202842	* 2SC5242-O or * 2SC5242-R
Q525, Q526	2202833 or 2202832	* 2SA1962-O or * 2SA1962-R
Q527, Q528	2211733 or 2211732	2SC1845-E or 2SC1845-F
Q529, Q530	2213284	2SC1740S-R
Q581, Q582	2211733 or 2211732	2SC1845-E or 2SC1845-F
Q583	2211792 or 2211793	2SA992-F or 2SA992-E
Q591, Q592	2213640	DTC123JS
Q924	2211455	2SA1015-GR
Q1501~Q1503	2211733 or 2211732	* 2SC1845-E or * 2SC1845-F
Q1514	2211353	2SA949-O
Q1504, Q1505	2211633	2SC2229-O
Q1506, Q1508	2211353	2SA949-O
Q1507	2213284	2SC1740S-R
Q1509, Q1515	2203010	2SC5171
Q1510	2203000	2SA1930
Q1511	2202843 or 2202842	* 2SC5242-O or * 2SC5242-R
Q1513	2202833 or 2202832	* 2SA1962-O or * 2SA1962-R
Diodes		
D281, D282	223163	ISS133
D401~D403	223163	ISS133
D501~D504	22380032	1SR139-100
D591, D592	223163	ISS133
D910	223163	ISS133
D911	22380021	△ RS403L
D915~D921	22380032	△ 1SR139-100
D922	224473304	MTZJ33D
D923, D924	223163	ISS133

CIRCUIT NO. PART NO. DESCRIPTION

Capacitors		
C281~C283	354741009	10 μ F, 16V, Elect.
C284	354780229	2.2 μ F, 50V, Elect.
C285, C286	354741009	10 μ F, 16V, Elect.
C303, C304	354741009	10 μ F, 16V, Elect.
C307, C308	354721019	100 μ F, 6.3V, Elect.
C309, C310	374726224	6200pF \pm 5%, 50V, Plastic
C311, C312	374721824	1800pF \pm 5%, 50V, Plastic
C313~C316	354741009	10 μ F, 16V, Elect.
C391~C393	374721015	100pF \pm 10%, 50V, Plastic
C401, C402	354741009	10 μ F, 16V, Elect.
C407~C410	374721044	0.1 μ F \pm 5%, 50V, Plastic
C413, C414	354741009	10 μ F, 16V, Elect.
C415, C416	374721534	0.015 μ F \pm 5%, 50V, Plastic
C417, C418	374721015	100pF \pm 10%, 50V, Plastic
C427	374721044	0.1 μ F \pm 5%, 50V, Plastic
C431, C432	354741009	10 μ F, 16V, Elect.
C433~C436	374721224	1200pF \pm 5%, 50V, Plastic
C437, C438	354741009	10 μ F, 16V, Elect.
C439, C440	374722224	2200pF \pm 5%, 50V, Plastic
C451, C457	354741009	10 μ F, 16V, Elect.
C454, C456	374721044	0.1 μ F \pm 5%, 50V, Plastic
C458, C459	374721224	1200pF \pm 5%, 50V, Plastic
C460, C463	354741009	10 μ F, 16V, Elect.
C461	374722224	2200pF \pm 5%, 50V, Plastic
C462	374721044	0.1 μ F \pm 5%, 50V, Plastic
C465~C467	354741009	10 μ F, 16V, Elect.
C501, C502	354741009	10 μ F, 16V, Elect.
C503, C504	374721015	100pF \pm 10%, 50V, Plastic
C505, C506	354742219	220 μ F, 16V, Elect.
C507~C510	354781009	10 μ F, 50V, Elect.
C519, C520	374721044	0.1 μ F \pm 5%, 50V, Plastic
C521, C522	354744709	47 μ F, 16V, Elect.
C525~C528	354774719	470 μ F, 6.3V, Elect.
C581	354721019	100 μ F, 6.3V, Elect.
C910	354732219	220 μ F, 10V, Elect.
C915, C916	3504280 or 3504298	8200 μ F, 56V or 8200 μ F, 56V, Elect. <D>
C915, C916	3504285 or 3504299	10000 μ F, 56V or 10000 μ F, 56V, Elect. <P/W/A/T/K>
C917	354753329	3300 μ F, 25V, Elect.
C918	354761029	1000 μ F, 35V, Elect.
C922, C923	354781009	10 μ F, 50V, Elect.
C924, C925	3504213	4700 μ F, 35V, Elect.
C926	354781009	10 μ F, 50V, Elect.
C928, C929	354781019	100 μ F, 50V, Elect.
C932	354741009	10 μ F, 16V, Elect.
C1501	354742209	22 μ F, 16V, Elect.
C1502	374721015	100pF \pm 10%, 50V, Plastic
C1503	354741019	100 μ F, 16V, Elect.
C1504, C1505	354781009	10 μ F, 50V, Elect.
C1511	374721044	0.1 μ F \pm 5%, 50V, Plastic
C1512	354744709	47 μ F, 16V, Elect.
C1513~C1517	354781009	10 μ F, 50V, Elect.
Resistors		
R521~R524	443526804	68ohm \pm 5%, 1/2W, Metal oxide
R525, R526	443525604	56ohm \pm 5%, 1/2W, Metal oxide
R527, R528	443526804	68ohm \pm 5%, 1/2W, Metal oxide
R539~R542	453530224	2.2ohm \pm 5%, 1/2W, Metal
R543, R544	443521014	100ohm \pm 5%, 1/2W, Metal oxide
R547, R548	4800045	RGC55, 0.1 OHM X2, Metal plate
R555, R556	453630824	8.2ohm \pm 5%, 1W, Metal
R557, R558	443623914	390ohm \pm 5%, 1W, Metal oxide
R567~R570	453530224	2.2ohm \pm 5%, 1/2W, Metal
R933	443524704	47ohm \pm 5%, 1/2W, Metal oxide
R1512, R1513	443526804	68ohm \pm 5%, 1/2W, Metal oxide
R1515	443525604	56ohm \pm 5%, 1/2W, Metal oxide
R1516	443526804	68ohm \pm 5%, 1/2W, Metal oxide

NOTE: <D>:120V model only
<P>:230V model only
<W>:Worldwide model only

CAUTION: Replacement for transistor of mark *, if necessary,
must be made from the same beta group (HFE) as
the original type.

CIRCUIT NO.	PART NO.	DESCRIPTION	CIRCUIT NO.	PART NO.	DESCRIPTION
Resistors					
R1519	443521014	100ohm±5%, 1/2W, Metal oxide	D704,D705	223163	1SS133
R1522,R1523	453530224	2.2ohm±5%, 1/2W, Metal	D706,D707	224470562	MTZJ5.6B, Zener
R1524	4800045	RGC55, 0.1 Ohm X2, Metal plate	D708	223163	1SS133
R1529	453630824	8.2ohm±5%, 1W, Metal	D709	225290	SEL4110R, LED
Relay					
RL501,RL502	25065517	NRL-2P5A-DC24-098	D710~D712	223163	1SS133
Terminals					
P301,P302	25045458 or 25045300	NPJ-6PDBL279 or NPJ-6PDBL159	L701~L703	233454K220	NCH-1452, 220K, Choke
P303	25045460Y or 25045303Y	NPJ-4PDBL280 or NPJ-4PDBL162	X701	3010163	CST4.19MGW, Ceramic
P501	25060224Y or 25060158Y	NTM-8PDML146 or NTM-8PDML084	X751	3010203	AF6146CG, Crystal <P>
Plugs					
P211a	25055709	NPLG-13P665	C701	3000075	EECSSR5T473, Super
P612a	25055706Y	NPLG-10P662	C702	375524744	0.47 μ F±5%, 50V, Plastic
Sockets					
P611a	25051752Y	NSCT-12P1539	C703	355721019	100 μ F,6.3V, Elect.
P701b	25050975Y or 25051842	NSCT-35P762 NSCT-35P1629	C704	355780109	1 μ F,50V, Elect.
JL261a	25051088	NSCT-4P875	C706,C707	355780109	1 μ F,50V, Elect.
JL401a	25051093	NSCT-9P880	C709,C711	355721019	100 μ F,6.3V, Elect. <P>
JL911a,JL912a	25051111	NSCT-7P898	C751	354721019	100 μ F,6.3V, Elect. <P>
JL914a	25051108	NSCT-4P895	C754,C760	374724724	4700pF±5%, 50V, Plastic <P>
P1103b	25051751Y	NSCT-6P1538 <SE>	C755,C756	374723324	3300pF±5%, 50V, Plastic <P>
P1104b	25051753Y	NSCT-3P1540 <SE>	C757	354780229	2.2 μ F,50V, Elect. <P>
Radiators					
Q921a	27160209	RAD-67	C758	374724734	0.047 μ F±5%, 50V, Plastic <P>
Q922a	27160227	RAD-076	C759	374722234	0.022 μ F±5%, 50V, Plastic <P>
Screws					
Q921b,Q922b	838430107	3TTB+10S(BC), Self-tapping	R798	5210265	N06HR50KBC, Trimming <P>
R1167~R1169					
N11RL10KB17Z, Variable <SE>					
SECONDARY CIRCUIT PC BOARD (NAETC-5885-1A/1B/2)					
CIRCUIT NO.	PART NO.	DESCRIPTION	CIRCUIT NO.	PART NO.	DESCRIPTION
F991a,F992a	25050065	▲ YSH403T, Fuseholder	JL711a	25051090	NSCT-6P877 or
F991,F992	252077	▲ 4A-SE-EAK, Fuse <P/A/T/K/W>	JL711a	25051879	NSCT-35P1666
F991,F992	252163Y	▲ 4A-UL/T-237, Fuse <D>	P701	25055038	NPLG-2P29 <P>
JL911b	25051111	NSCT-7P898, Socket	P701a	25050941Y or	NSCT-35P728 or
C992,C993	374721044	0.1 μ F±5%, 50V, Plastic capacitor	JL751a	25051842Y	NSCT-35P1269
C995,C996	374731044	0.1 μ F±5%, 50V, Plastic capacitor	JL751a	25051091	NSCT-7P878 <SE>
C997,C998	374721044	0.1 μ F±5%, 50V, Plastic capacitor	Holder		
R991,R992	453530224	2.2ohm±5%, 1/2W, Metal resistor	Q702a	27190989	Holder FL
TONE CONTROL CIRCUIT PC BOARD (NAETC-5886-1A/1B/2)					
CIRCUIT NO.	PART NO.	DESCRIPTION	CIRCUIT NO.	PART NO.	DESCRIPTION
R400	5104288	N11RCL250KWT20Z, Variable resistor	Front end		
R419,R421	5104356	N14RLC100KWT20Z, Variable resistor	TU001	240098	ENV172D1G1, Front end <D>
JL401b	25051093	NSCT-9P880, Wire holder	TU001	240102	FE417-G02, Front end <P/W/T/A/K>
C411,C412	374721534	0.015 μ F±5%, 50V, Plastic capacitor	ICs		
TUNER CIRCUIT PC BOARD (NARF-5888-1A/1B/1C/1D/1E/1F/2A/2B/2C)					
CIRCUIT NO.	PART NO.	DESCRIPTION			
DISPLAY CIRCUIT PC BOARD (NADIS-5887-1A/1B/1C/1D/1E/1F/2A/2B/2C)					
CIRCUIT NO.	PART NO.	DESCRIPTION			
Remote sensor					
U701	24130011	PIC-12043TE2, Remote sensor	Q121	22240090	LM7001
FL tube			Q141	22240983	LA1851N-F
Q702	212156	12-BT-101GK	Transistors		
ICs			Q101	2210746	2SC945A-P <P/W/T/A/K>
Q701	22241059	μ PD78043FGF-018	Q102	2211723	2SC1923-O
Q751	22240679	μ PC1346CS <P>	Q122,Q142	2213510 or	DTA114ES or
Transistors			Q175	2214350	RN2202
Q703	221282	DTC144ES	Q123	2212445	2SK365-GR
Q705,Q706	2213284	2SC1740S-R	Q124	2212115 or	2SC2458-GR or
Q707	2213510	DTA114ES	Q171,Q172	2213284	2SC1740S-R
Diodes			Q143	221282	DTC144ES
D701,D702	223163	1SS133	Q144	2213640	DTC123JS
D703	224471203	MTZJ12C, Zener	Q173,Q174	2212794	2SD1468-R
Diodes			Q182	2212115 or	2SC2458-GR or
Diode			2213284	2213284	2SC1740S-R <P>
D165					
MTZJ5.1B, Zener					

NOTE: THE COMPONENTS IDENTIFIED BY MARK **△**
ARE CRITICAL FOR RISK OF FIRE AND
ELECTRIC SHOCK. REPLACE ONLY WITH
PART NUMBER SPECIFIED.

CIRCUIT NO.	PART NO.	DESCRIPTION	CIRCUIT NO.	PART NO.	DESCRIPTION
Coils and transformers					
L101	233457	NFIF-4081, IF Transformer	C901	3500191	△ DE7150F-103M, AC400V/125V, IS
L102	233458	NFIF-4082, IF Transformer	C952	354743319	330 μ F, 16V, Elect.
L103	233471	NMC-6084 <P/W/T/A/K>	Fuseholders		
L104	233454K220	NCH-1452, 220K, Choke coil	F901a	25050065	△ YSH403T, Fuseholder <D/W>
L105	232174	NMRF-5077, RF block	F902a	25050065	△ YSH403T, Fuseholder <P/T/A/K>
L106	232139	NMIF-4062, IF transformer	F903a	25050065	△ YSH403T, Fuseholder <P/T>
L107,L108	233484	NMC-4085 <P/W/T/A/K>	Fuses		
L109,L110	231092	NCH-2140, Choke coil <D>	F901	252164Y	△ 5A-UL/T-237, Fuse <D/W>
Capacitors					
C001	354741019	100 μ F, 16V, Elect.	F902	252076	△ 3.15A-SE-EAK, Fuse <P/A/T/K/W>
C109,C110	374722724	2700pF \pm 5%, 50V, Plastic <P/W/T/A/K>	F903	252075	△ 2.5A-SE-EAK, Fuse <P/T>
C127	354721019	100 μ F, 6.3V, Elect.	JL961a	25051088	NSCT-4P875, Wire
C130	354780229	2.2 μ F, 50V, Elect.	P901a	25055675Y	NPLG-2P631, Plug
C131	374722234	0.022 μ F \pm 5%, 50V, Plastic	P902	25051126Y	△ NSCT-4P913, AC outlet <D>
C132,C153	354783399	0.33 μ F, 50V, Elect.	P903	25051125Y	△ NSCT-4P912, AC outlet <P/W/T>
C133,C142	354741019	100 μ F, 16V, Elect.	Resistors		
C145,C154	354741009	10 μ F, 16V, Elect.	R901	431533355	△ 3.3 Mohm, 1/2W, Solid <D>
C146	374723324	3300pF \pm 5%, 50V, Plastic	R951	453530824	8.2ohm \pm 5%, 1/2W, Metal <P/W/T/A/K>
C147	374721034	0.01 μ F \pm 5%, 50V, Plastic <P/W/T/A/K>	Relay		
	374721534	0.015 μ F \pm 5%, 50V, Plastic <D>	RL901	25065515	△ NRL-1P5A-DC12-096
C149	354780479	4.7 μ F, 50V, Elect.	Switch		
C151,C152	354780109	1 μ F, 50V, Elect.	S901	25065437	△ NSS-22157P, Slide <W>
C155,C156	374721034	0.01 μ F \pm 5%, 50V, Plastic <D>			
	374724724	4700pF \pm 5%, 50V, Plastic <P/T/A/K>			
	374725624	5600pF \pm 5%, 50V, Plastic <W>			
C159,C177	354780229	2.2 μ F, 50V, Elect.			
C160	354784799	0.47 μ F, 50V, Elect.			
C162,C166	354741009	10 μ F, 16V, Elect.			
C171,C172	354741009	10 μ F, 16V, Elect.			
C173,C174	374721024	1000pF \pm 5%, 50V, Plastic <D>			
C178	354741009	10 μ F, 16V, Elect.			
Oscillators					
X104	3010268	CSB456F23, Ceramic			
X121	3010141	XTL-7.2M, Crystal			
Ceramic filters					
X101,X103	3010071	SFE10.7MA5(RED)			
X102	3010130	SFE10.7MZ2A <P/W/T/A/K>			
X105	3010123	SFZ-450JL			
Resistors					
R150	5210261	N06HR5KBC, Trimming			
R158	5210264	N06HR30KBC, Trimming			
Terminals					
P101	25060117	NTM-2PDML051 or			
	25060222	NTM-2PDML144 <P/W/T/A/K>			
	25060195	NTM-4PDML117 or			
	25060239	NTM-4PDML161 <D>			
Plug					
TP101	25055038Y	NPLG-2P29			
Socket					
P211b	25051238	NSCT-13P1028			
POWER SUPPLY CIRCUIT PC BOARD (NAPS-5889-1A/1B/1C/1D/1E/1F/2A/2B/2C)					
CIRCUIT NO. PART NO. DESCRIPTION					
Transistor					
Q951	2213640	DTC123JS	VOLUME CIRCUIT PC BOARD (NAAF-5894-1A/1B/1C/2/2A)		
Diodes					
D951,D953	22380032	1SR139-100 <P/W/T/A/K>	Q601,Q603	222502	NJM4558D-X
D952	22380032	1SR139-100	Q602	22241053	NJW1102AF
D954	22380032	1SR139-100 <P/W/T/A/K>	Q604	222840661	4066B <SE>
D955	223163	ISS133	Q605	22240800	TC9164AN
Power transformer					
T902	2300670AY or △	NPT-1111D or	Q651	22240995 or	NJU9702D or
	2301258Y	△ NPT-1294D, Power transformer <D>		22240686	M65830P
	2300671A	△ NPT-1111P, Power transformer <P/T/A>	Q671,Q672	222956	NJM2068D-D
	2300672AY	△ NPT-1111DG, Power transformer <W/K>	Q673,Q674	22241054	M62429FP

REAR AMPLIFIER PC BOARD (NAAF-5895-1A/1B/1C/2/2A)			CIRCUIT NO.	PART NO.	DESCRIPTION
CIRCUIT NO.	PART NO.	DESCRIPTION			
	Transistors				
Q801, Q802	2211732 or 2215116	2SC1845-F or 2SC1775-F	Q606	221281	DTC114YS <SE>
Q803-Q806	2211353	2SA949-O	Q607	2213090	DTA114YS <SE>
Q807, Q808	2211633	2SC2229-O	Q652	2215163	2SD667A-C
Q809, Q810	2211732 or 2215116	2SC1845-F or 2SC1775-F	Q675	2213631	RN1241-A
Q811, Q812	2213284	2SC1740S-R	Q677, Q678	2213631	RN1241-A
Q813, Q814	2211353	2SA949-O	X651	3010217	CST2.04MG040, Ceramic
Q815, Q816	2213284	2SC1740S-R	D651	224470682	MTZJ6.8B, Zener
Q817, Q818	2211633	2SC2229-O	D652-D657	223163	1SS133
Q819, Q820	2215163	2SD667A-C	D659	223163	1SS133
Q821, Q822	2215173	2SB647A-C	C601, C602	354780229	2.2 μ F, 50V, Elect.
Q823, Q824	2202923 or 2202922	* 2SC5196-O or * 2SC5196-R	C605, C606	354781009	10 μ F, 50V, Elect.
Q825, Q826	2202913 or 2202912	* 2SA1939-O or * 2SA1939-R	C607-C610	374721044	0.1 μ F \pm 5%, 50V, Plastic
Q827-Q830	2211732 or 2215116	2SC1845-F or 2SC1775-F	C611, C612	374726814	680pF \pm 5%, 50V, Plastic
	Diode		C613, C614	354741009	10 μ F, 16V, Elect.
D801, D802	22380032	1SR139-100	C616, C619	354742209	22 μ F, 16V, Elect.
	Capacitors		C617	374724724	4700pF \pm 5%, 50V, Plastic
C801, C802	354742209	22 μ F, 16V, Elect.	C618, C657	354744709	47 μ F, 16V, Elect.
C805, C806	354744709	47 μ F, 16V, Elect.	C620-C622	354741009	10 μ F, 16V, Elect.
C807, C808	354741019	100 μ F, 16V, Elect.	C623, C638	354781099	0.1 μ F, 50V, Elect.
C815, C816	354781009	10 μ F, 50V, Elect.	C624	354741009	10 μ F, 16V, Elect.
C819, C820	354781009	10 μ F, 50V, Elect.	C625	354722219	220 μ F, 6.3V, Elect.
C823, C824	374724734	0.047 μ F \pm 5%, 50V, Plastic	C627	374725614	560pF \pm 5%, 50V, Plastic
C827, C828	354764709	47 μ F, 35V, Elect.	C628	374721024	1000pF \pm 5%, 50V, Plastic
C831, C832	354762219	220 μ F, 35V, Elect.	C629, C656	374725624	5600pF \pm 5%, 50V, Plastic
	Resistors		C630	374724734	0.047 μ F \pm 5%, 50V, Plastic
R823-R826	443526804	68ohm \pm 5%, 1/2W, Metal oxide	C631	354786899	0.68 μ F, 50V, Elect.
R833, R834	443525604	56ohm \pm 5%, 1/2W, Metal oxide	C632, C633	354782299	0.22 μ F, 50V, Elect.
R835, R836	443526804	68ohm \pm 5%, 1/2W, Metal oxide	C634, C635	354780479	4.7 μ F, 50V, Elect.
R841, R842	443521014	100ohm \pm 5%, 1/2W, Metal oxide	C636, C637	354782299	0.22 μ F, 50V, Elect.
R843-R846	453530224	2.2ohm \pm 5%, 1/2W, Metal	C639, C640	374724734	0.047 μ F \pm 5%, 50V, Plastic
R847, R848	4800047	RGC22, 0.1 ohm \times 2, Metal plate	C641, C642	354781099	0.1 μ F, 50V, Elect.
R855, R856	453630824	8.2ohm \pm 5%, 1W, Metal	C643, C644	374722234	0.022 μ F \pm 5%, 50V, Plastic
R859, R860	453530224	2.2ohm \pm 5%, 1/2W, Metal	C645	354781099	0.1 μ F, 50V, Elect.
	Wire traps		C647-C649	354741009	10 μ F, 16V, Elect.
JL621b	25055624	NPLG-3P586	C650	354780479	4.7 μ F, 50V, Elect.
JL711b	25055627	NPLG-6P589	C651	374722224	2200pF \pm 5%, 50V, Plastic
JL912b	25050271	NSCT-7P99	C652, C653	374725614	560pF \pm 5%, 50V, Plastic
JL961b	25055625	NPLG-4P587	C654, C655	374721044	0.1 μ F \pm 5%, 50V, Plastic
	Switch		C658, C659	374724734	0.047 μ F \pm 5%, 50V, Plastic
S961	25065286	NSS-22112, Slide <W>	C660	354781009	10 μ F, 50V, Elect.
	Terminals		C661, C662	354721019	100 μ F, 6.3V, Elect.
P961	25045439Y	NPJ-1PDBL263	C663	354741009	10 μ F, 16V, Elect.
P801	25060161Y	NTM-4PDMNL087	C664	354741019	100 μ F, 16V, Elect.
			C665, C666	354741009	10 μ F, 16V, Elect. <SE>
			C667, C668	354741009	10 μ F, 16V, Elect.
			C669, C670	354780229	2.2 μ F, 50V, Elect.
			C671-C673	354741009	10 μ F, 16V, Elect.
			C674	354780229	2.2 μ F, 50V, Elect.
			C676, C677	354741009	10 μ F, 16V, Elect.
			C685, C686	354721019	100 μ F, 6.3V, Elect.
			C687	354741009	10 μ F, 16V, Elect.
			C689-C691	354741009	10 μ F, 16V, Elect.
	Resistor				
Q1103	22241060	YSS240	R696	5104392	N16RFL50KA25F, Variable
Q1104	222780565JRC	NIM78M56FA			
Q1105	22241061	YAC516			
Q1106-Q1110	222956	NJM2068D-D	JL621a	25051087	NSCT-3P874
Q1111	22241062	HM62256BLSP-7	JL622a	25051094	NSCT-10P881
Q1112	222956	NJM2068D-D	P611b	25055885Y	NPLG-12P841
	Diodes		P612b	25051235Y	NSCT-10P1025
D1101-D1106	223163	1SS133			
	Oscillator				
X1101	3010112	KD6586FFB			

CIRCUIT NO.	PART NO.	DESCRIPTION
Capacitors		
C1116,C1117	354741009	10 μ F,16V, Elect.
C1118,C1120	374723324	3300pF \pm 5%, 50V, Plastic
C1121,C1131	354741009	10 μ F,16V, Elect.
C1122	374721024	1000pF \pm 5%, 50V, Plastic
C1123	354741019	100 μ F,16V, Elect.
C1126,C1129	354741009	10 μ F,16V, Elect.
C1130,C1165	374721044	0.1 μ F \pm 5%, 50V, Plastic
C1132,C1133	374721044	0.1 μ F \pm 5%, 50V, Plastic
C1134,C1138	354741009	10 μ F,16V, Elect.
C1135,C1136	374721044	0.1 μ F \pm 5%, 50V, Plastic
C1139,C1147	374722724	2700pF \pm 5%, 50V, Plastic
C1140,C1148	374726824	6800pF \pm 5%, 50V, Plastic
C1141,C1149	374723915	390pF \pm 10%, 50V, Plastic
C1142,C1146	354741009	10 μ F,16V, Elect.
C1150,C1156	374722724	2700pF \pm 5%, 50V, Plastic
C1151,C1154	374726824	6800pF \pm 5%, 50V, Plastic
C1152,C1158	374723915	390pF \pm 10%, 50V, Plastic
C1153,C1159	374721824	1800pF \pm 5%, 50V, Plastic
C1155,C1161	374722715	270pF \pm 10%, 50V, Plastic
C1157,C1160	374726824	6800pF \pm 5%, 50V, Plastic
C1162	374722724	2700pF \pm 5%, 50V, Plastic
C1163	374726824	6800pF \pm 5%, 50V, Plastic
C1164	374723915	390pF \pm 10%, 50V, Plastic
C1170,C1171	374721015	100pF \pm 10%, 50V, Plastic
Plugs		
JL623b	25055626Y	NPLG-5P588
JL752b	25055672Y	NPLG-6P589
P1103a	25055884Y	NPLG-6P840
P1104a	25055889Y	NPLG-3P842

MIC. TERMINAL PC BOARD (NAETC-5897-1)

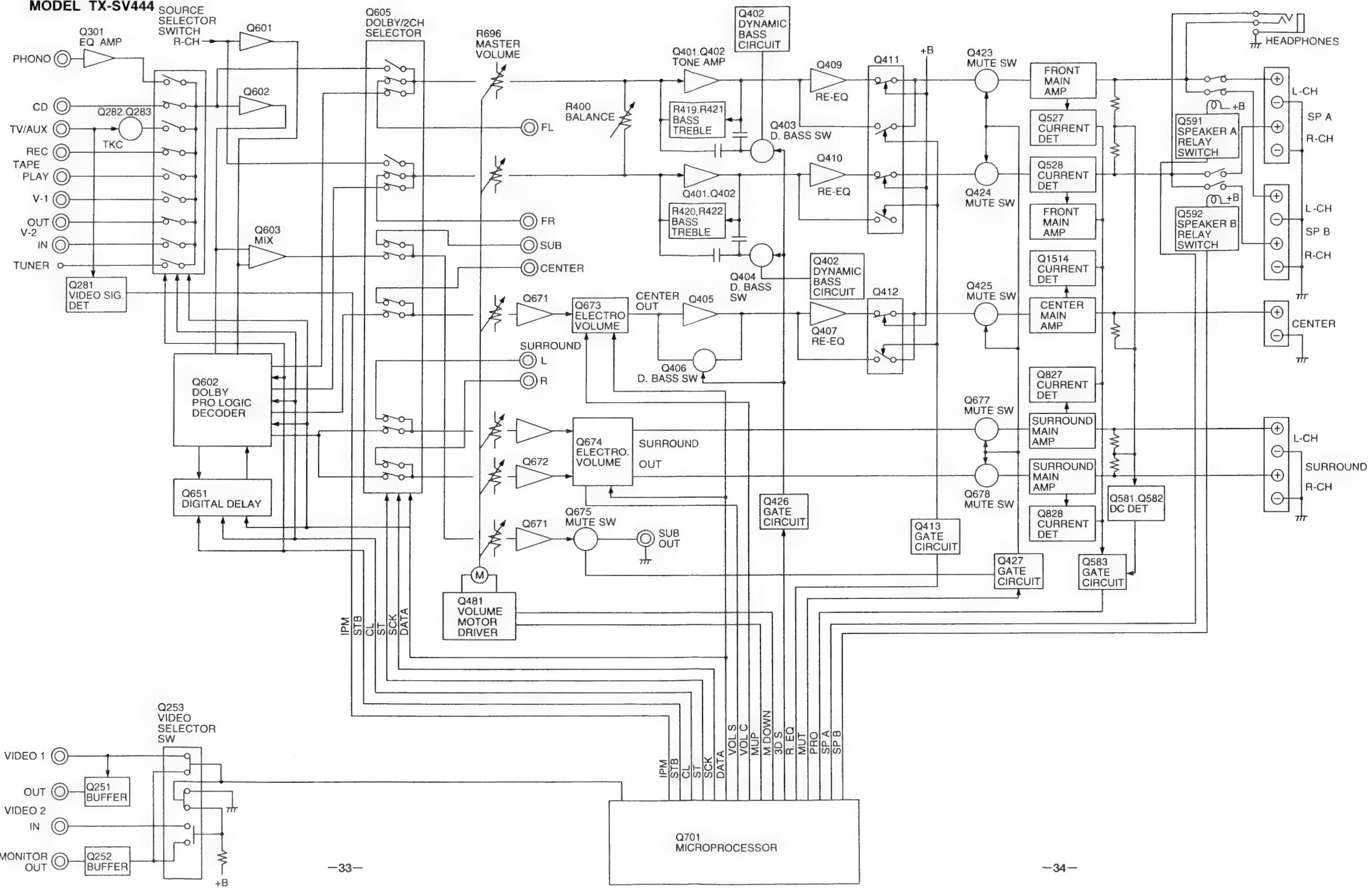
TX-SE500 only

CIRCUIT NO.	PART NO.	DESCRIPTION
ICs		
Q1101,Q1102	222956	NJM2068D-D
Capacitors		
C1101	374721015	100pF \pm 10%, 50V, Plastic
C1102	354744709	47 μ F,16V, Elect.
C1103	374722224	2200pF \pm 5%, 50V, Plastic
C1104	374721215	120pF \pm 10%, 50V, Plastic
C1105,C1106	354741019	100 μ F,16V, Elect.
C1107	374721015	100pF \pm 10%, 50V, Plastic
C1108	354744709	47 μ F,16V, Elect.
C1109	374722224	2200pF \pm 5%, 50V, Plastic
C1110	374721215	120pF \pm 10%, 50V, Plastic
C1111	374721024	1000pF \pm 5%, 50V, Plastic
C1112	354742209	22 μ F,16V, Elect.
C1113	354744709	47 μ F,16V, Elect.
C1114,C1115	374721015	100pF \pm 10%, 50V, Plastic
Terminals		
P1101,P1102	25045492Y	NPJ-1PDBL309
Plug		
JL751a	25055628Y	NPLG-7P590
Socket		
JL752a	25051090Y	NSCT-6P877

NOTE: <D>:120V model only**<P>:230V model only****<W>: Asian model only****<T>: Taiwanese model only****<A>: Australian model only****<K>: Korean model only****<SE>: TX-SE500 only**

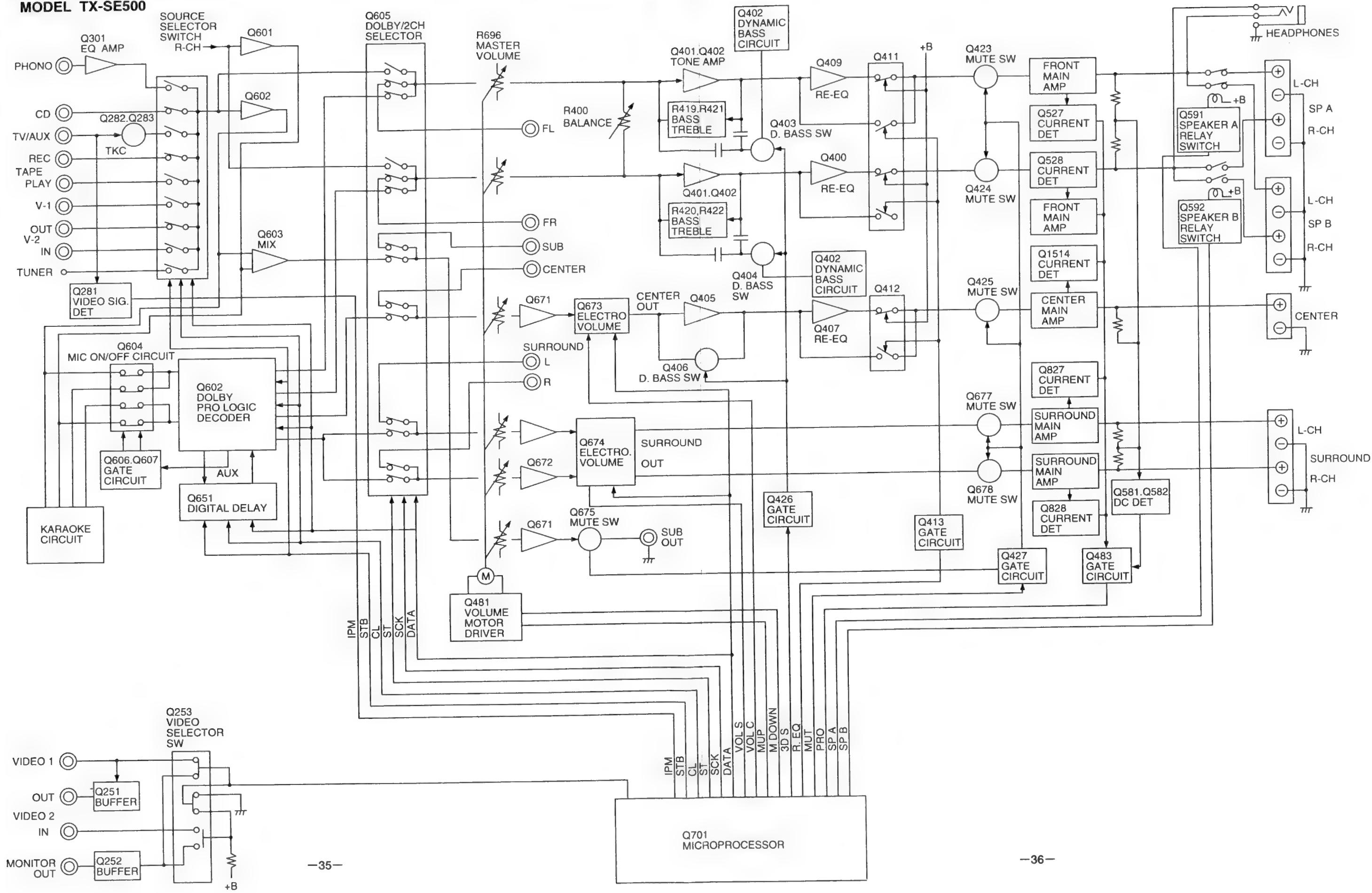
BLOCK DIAGRAM

MODEL TX-SV444

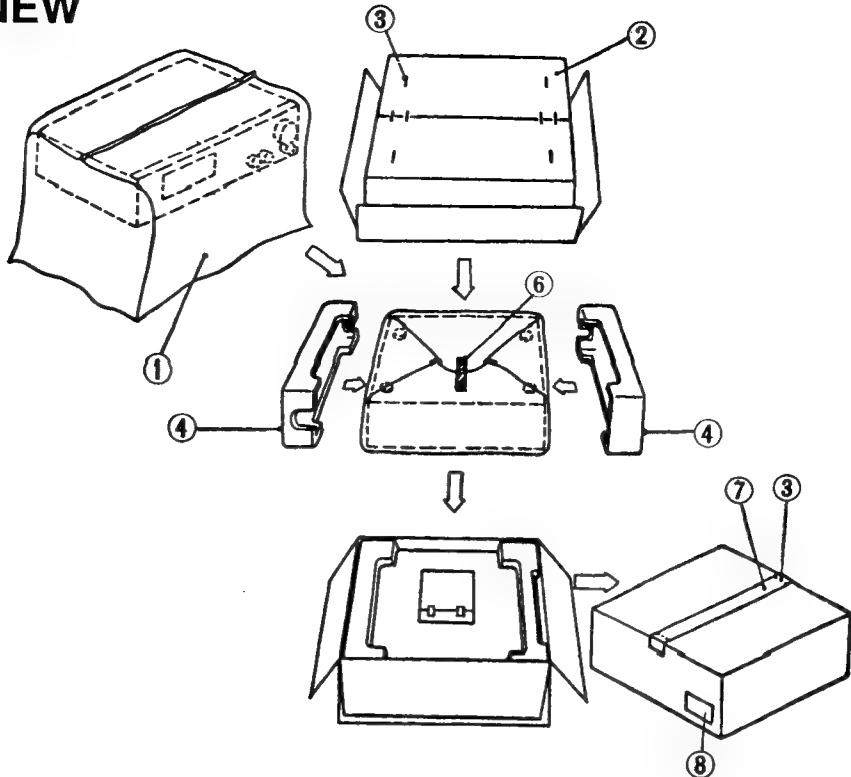


BLOCK DIAGRAM

MODEL TX-SE500



PACKING VIEW



MODEL TX-SV444

REF. NO.	PART NO.	DESCRIPTION
1	29100034-1AY	850x650, Poly bag
2	29053089Y	Carton box <D>
2	29053090AY	Carton box <A/K/T/W>
2	29053091Y	Carton box <P>
3	282321	Staple
4	29091763AY	Pad ass'y
6	261504	Paper tape
7	29110071	P. P tape
8	29362093Y	Label EAN <P>
	232140	NMA-3057, AM loop antenna
	3010054	UM-3, Battery
	24140327Y	RC-327S, Remote control
	25055018	CV-1K-1, Conversion plug <W>
	25065462Y	YAE21-0237, FM adaptor <K/A/T>
	29100097-1AY	350x250, Poly bag
	292111Y	FM antenna <D>
	292112Y	FM antenna <P/K/A/T/W>
	29342375Y	Instruction manual E
	29342376Y	Instruction manual FSI <P>
	29342377Y	Instruction manual GSWD <P>
	29342378Y	Instruction manual T <T/W>
	29358002K	Service station list <D>
	29361786Y	Label <K/A/W>
	29365019B	Warranty card <D>

NOTE: <D>:120V model only
 <P>:230V model only
 <W>:Taiwanese model only
 <A>:Australian model only
 <T>:Asian model only
 <K>:Korean model only

MODEL TX-SE500

REF. NO.	PART NO.	DESCRIPTION
1	29100034-1AY	850x650, Poly bag
2	29053092Y	Carton box
	29053146Y	Carton box <G>
3	282321	Staple
4	29091763AY	Pad ass'y
6	261504	Paper tape
7	29110071	P. P tape
8	29362094Y	Label EAN
	29362134Y	Label EAN <G>
	Accessory bag ass'y	
	24140326Y	RC-326S, Remote control
	3010054	UM-3, Battery
	232140	NMA-3057, AM loop antenna
	292112Y	FM antenna
	25065462Y	YAE21-0237, FM adaptor
	29342375Y	Instruction manual E
	29342378Y	Instruction manual T <P/W>
	29355221Y	Instruction sheet
	25055018	CV-1K-1, CV Plug
	29100097-1AY	350x250, Poly bag

NOTES:

: Black model only
 <G>: Golden model only
 <P>: Asian model only
 <W>: Taiwanese model only
 <K>: Korean model only

A

B

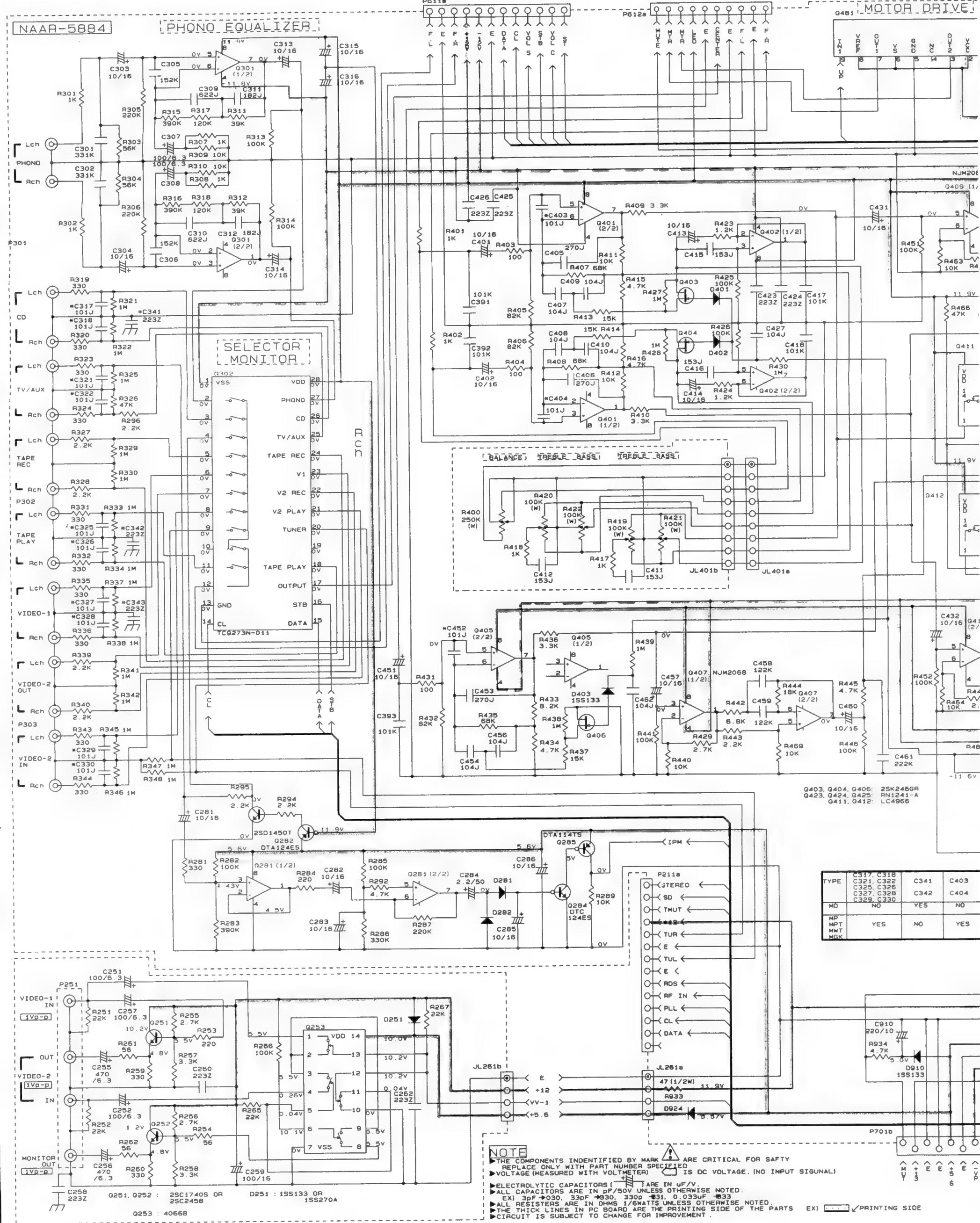
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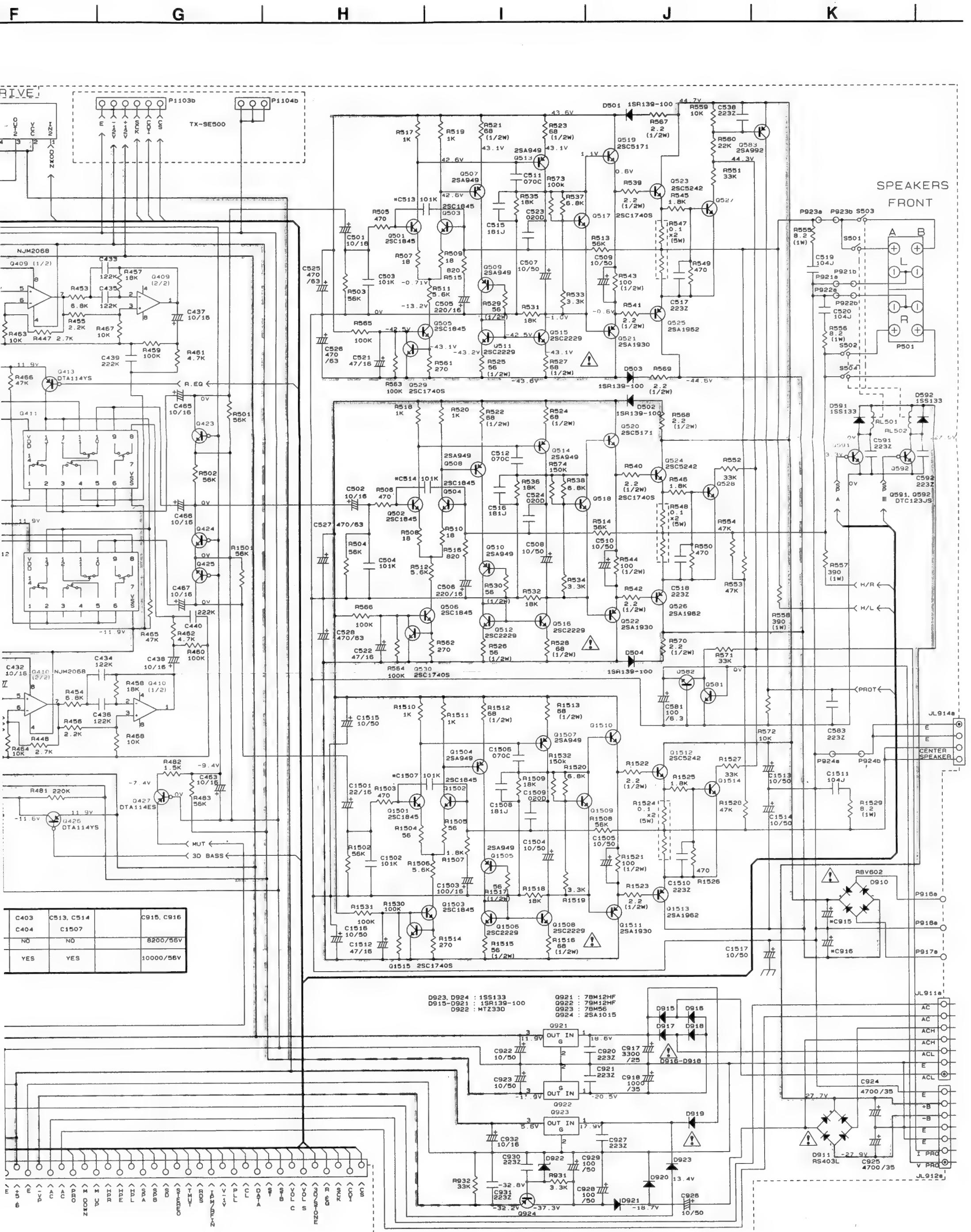
D

E

F

SCHEMATIC DIAGRAM 1/3





A

B

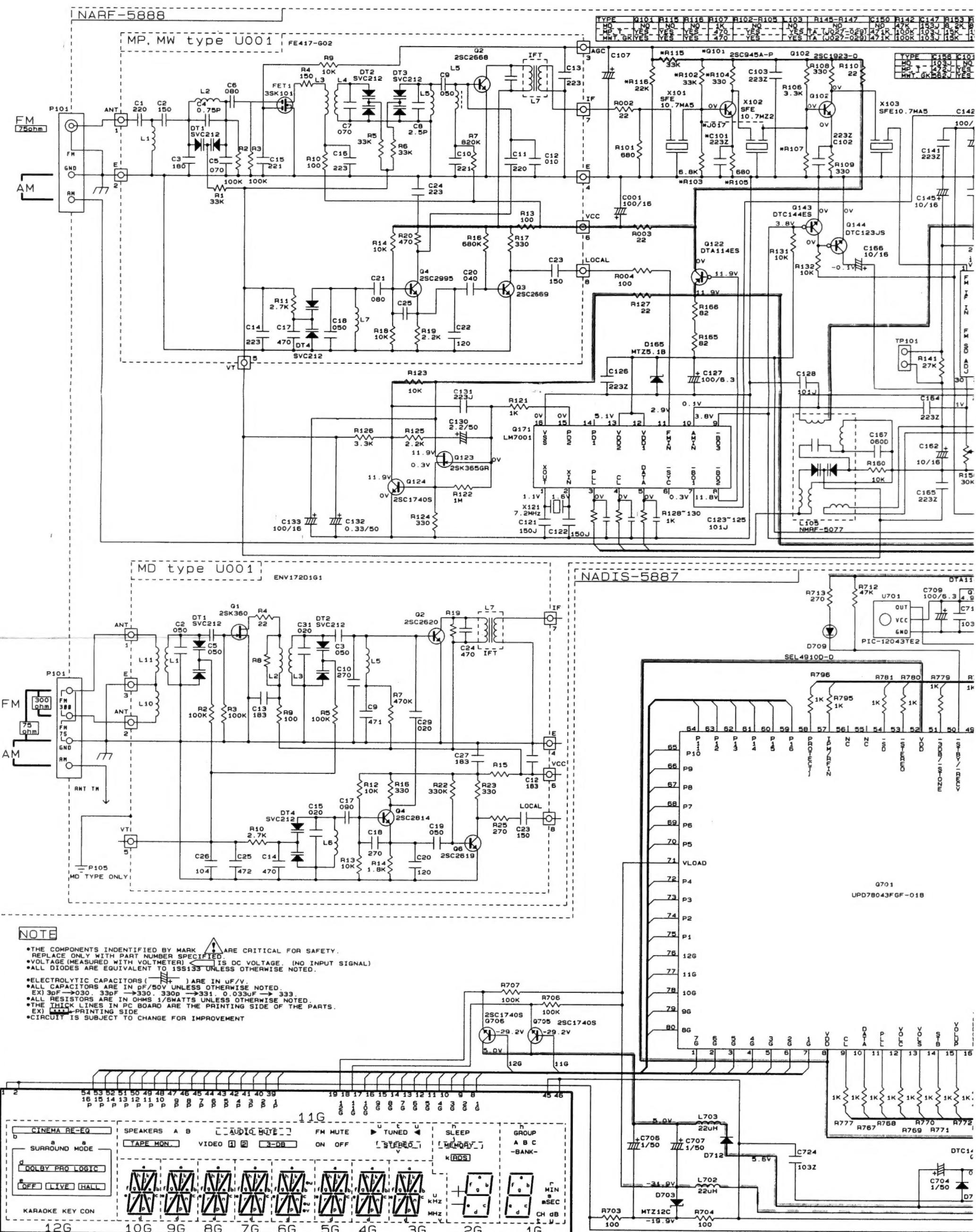
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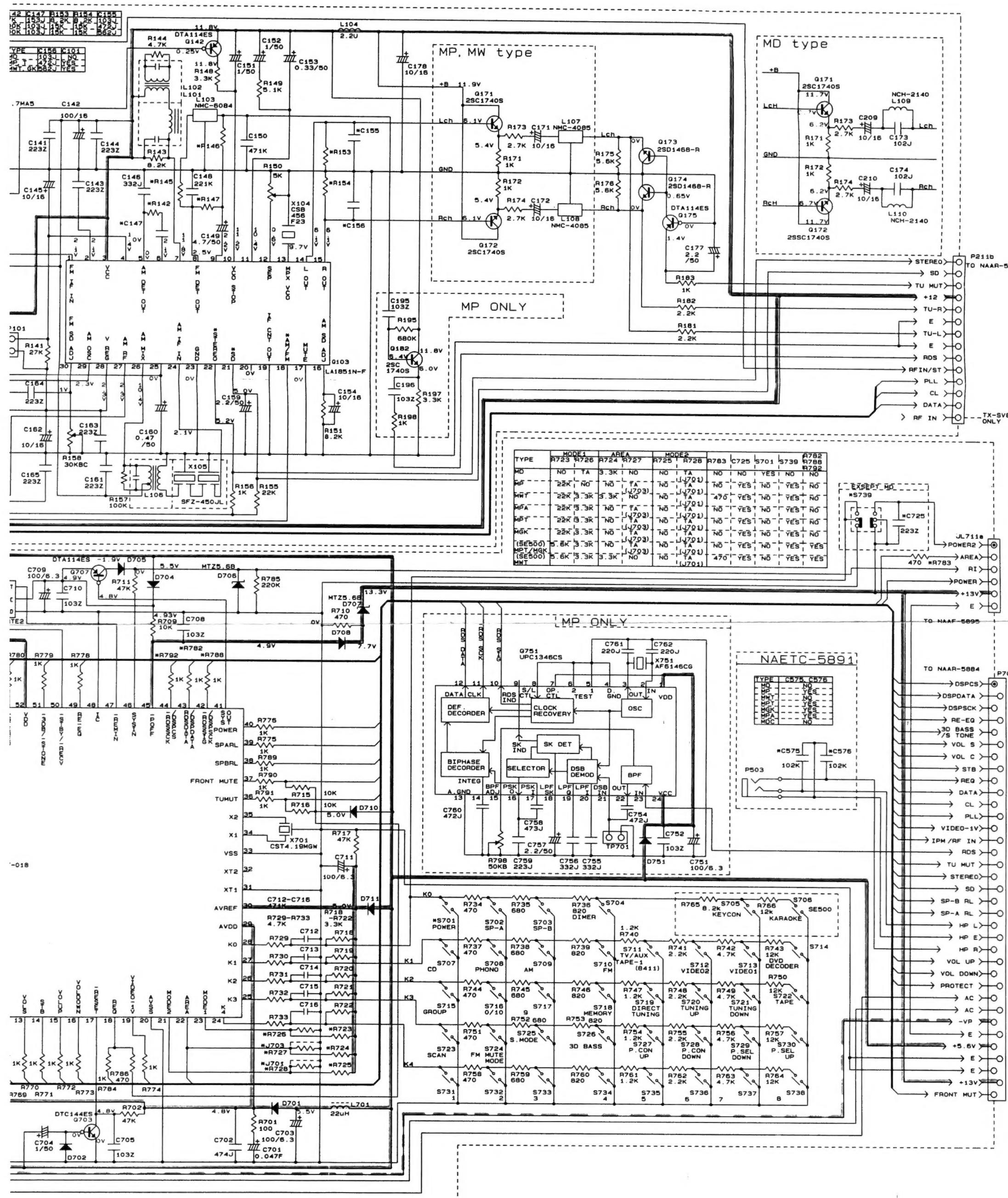
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E

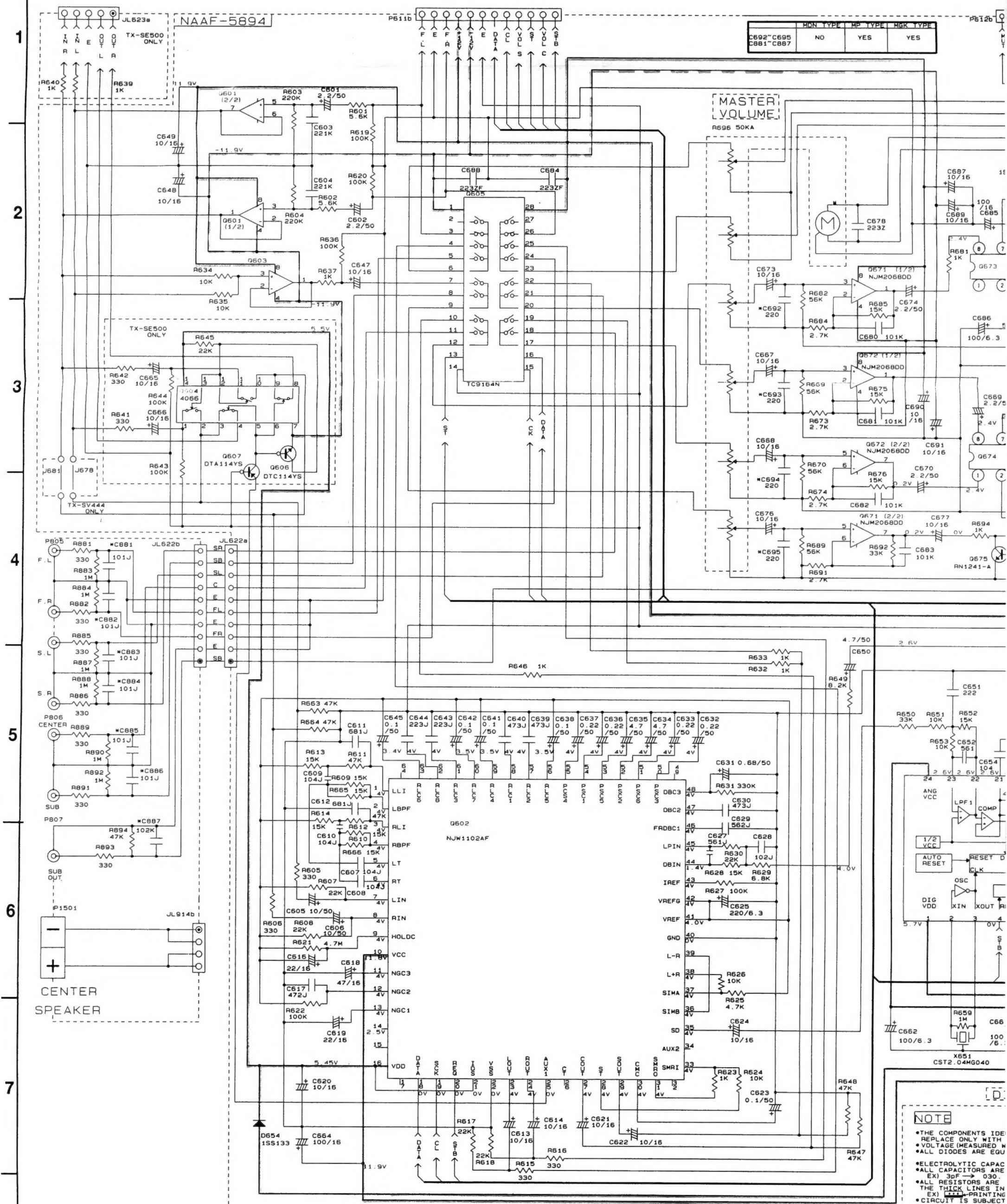
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SCHEMATIC DIAGRAM 2/3





SCHEMATIC DIAGRAM 3/3



NOTE

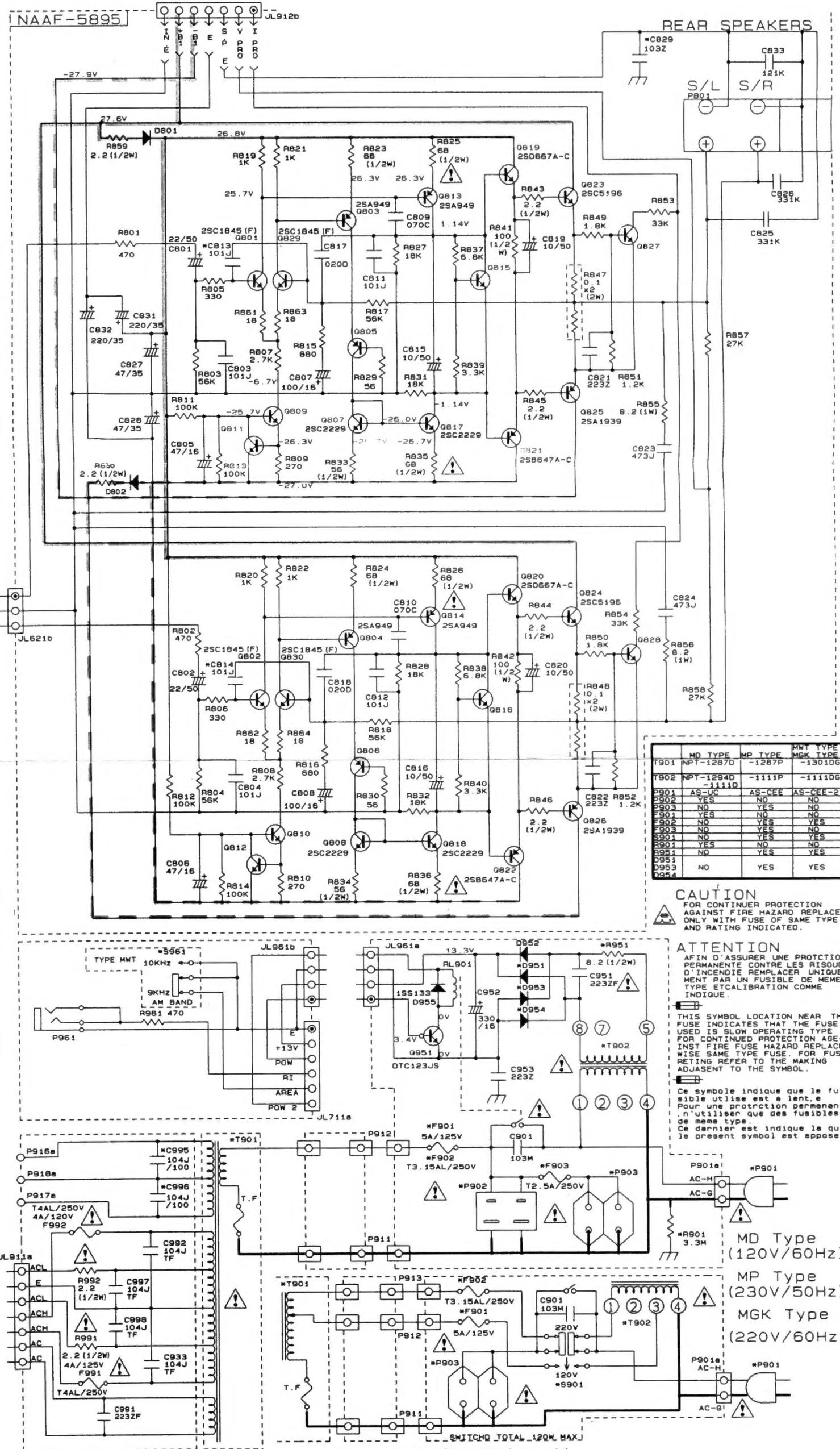
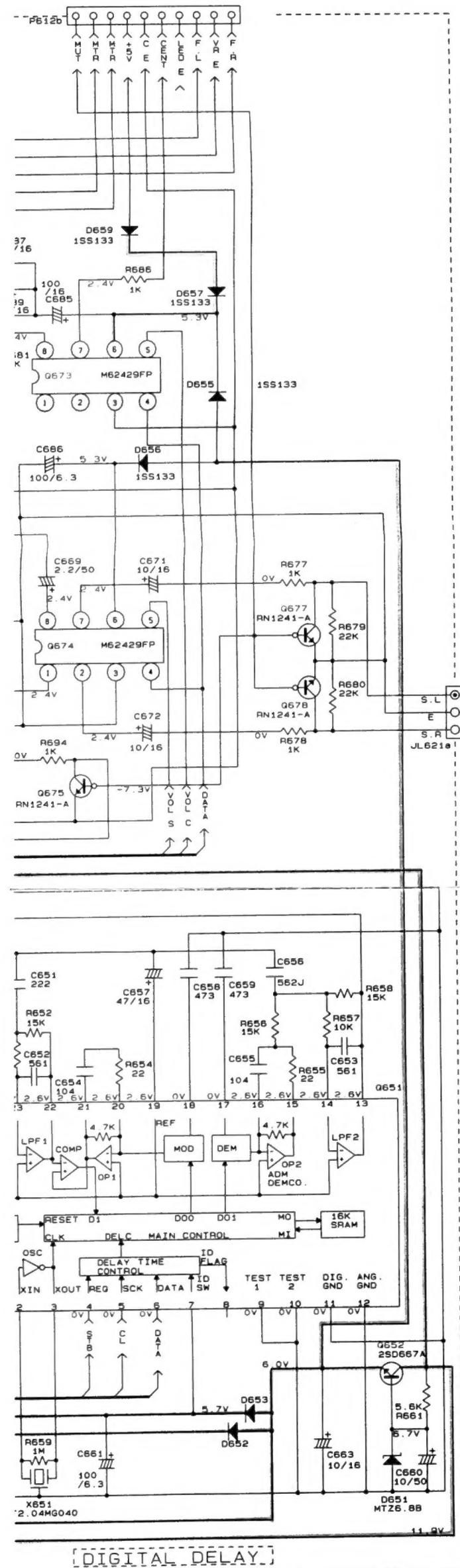
NOTE

• VOLTAGE MEASURED AT
• ALL DIODES ARE EQUAL

- ELECTROLYTIC CAPAC
- ALL CAPACITORS ARE EX. 30F → 030

• ALL RESISTORS ARE THE THICK LINES IN

EX) PRINTING
• CIRCUIT IS SUBJECT



COMPONENTS IDENTIFIED BY MARK  ARE CRITICAL FOR SAFETY.
CE ONLY WITH PART NUMBER SPECIFIED.
GE (MEASURED WITH VOLTmeter)  IS DC VOLTAGE. (NO INPUT SIGNAL
TOLLS ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.

ODES ARE EQUIVALENT TO 155153 UNLESS OTHERWISE NOTED.
POLY CAPACITORS (10⁴) ARE IN μ F/V.
CAPACITORS ARE IN pF/50V UNLESS OTHERWISE NOTED.
39F \rightarrow 030. 330F \rightarrow 330. 330pF \rightarrow 331. 0.033uF \rightarrow 333.
ESISTORS ARE IN OHMS 1/8WATTS UNLESS OTHERWISE NOTED.
HICK LINES IN PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
***PRINTING SIDE
IT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

ATTENTION
AFIN D'ASSURER UNE PROTECTION
PERMANENTE CONTRE LES RISQUES
D'INCENDIE, REMPLACER UNIQUE
MENT PAR UN FUSIBLE DE MEME
TYPE ET CALIBRATION COMME

INDIQUE.
THIS SYMBOL LOCATION NEAR THE
FUSE INDICATES THAT THE FUSE
IS SLOW OPERATING TYPE
OR CONTINUED PROTECTION AGE-
INST FIRE FUSE HAZARD REPLACE
SAME TYPE FUSE. FOR FUSE
REPLACEMENT REFER TO THE MAKING
ADJASCENT TO THE SYMBOL.

 Ce symbole indique que le fusible utilisé est à lent. e Pour une protection permanente n'utiliser que des fusibles

de même type.
Ce dernier est indiqué la quie présent symbol est apposé.

P901a1 *P901
AC-H

MD Type
(120V/60Hz)

MP Type
(230V/50Hz)

MGK Type
(230V/60Hz)

P901s
AC-H ***P901**